The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1376.—Vol. XXXII. LONDON, SATURDAY, JANUARY 4, 1862. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL. (Established 17 years.)

The question of peace or war (although Mr. Crofts considers the latter event now extremely improbable) tends not only to derange quotations of shares, but increases the difficulty of voluntarily recommending. Pending a solution of the question, Mr. Crofts will be happy to answer enquiries for shares as usual, and to the best of his ability.

*** Holders of mining shares DIFFICULT OF SALE in the OPEN MARKET may hear of purchasers, and also parties IN ARREAR OF CALLS, or sued by merchants, may learn their true legal position and be advised how to act, by applying to Mr. Crofts.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET, LONDON,

James Lane has FOR SALE, at nett prices:—80 Arthur, 12s. 6d.; 10 Bottle Hill, 11s.; 5 Buller and Basset, £1; 20 Carn Camborne, 18s.; 2 Caradon Consols, £11; 100 Dale, 12s. 6d.; 10 East Carn Brea, £10⅜; 20 East Budnick and Mount, 5s. 6d.; 10 East Caradon, £30; 20 East Russell, £3½; 50 Great Wheal Martha, 22s. 6d.; 100 South Guriyn, 3s.; 2 Grambler and St. Aubyn, £18; 50 Great Retallack, 15s.; 50 Great Trevaddoe, £1; 10 Hingston Down, £3¾; 5 Harriett, 25s.; 30 Kelly Bray, 13s.; 50 Lady Bertha, 14s.; 20 Ludcott, £2¾; 10 Movle, £2½; 20 Marke Valley, £10¼; 20 North Hellenbeagle, 21s.; 20 North Downs, £4½; 50 North Minera, 22s.; 10 Penhale Moor, £1; 2 Providence, £41¼; 20 Redmoor, 5s. 6d.; 100 Ribden, 4s. 3d.; 20 Rosewall Hill and Ransom, 52s.; 50 Sortridge, 12s. 6d.; 5 Seton, £125; 5 Trelawny, £16½; 2 West Rose Down, £10½; 20 Wheal Edward, £2½; 10 Wheal Hearle, £16¼; 50 West Silver Bank; 100 Worthing, 10s. 9d.

PETER WATSON, ENGLISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES,
79, OLD BROAD STREET, LONDON, E.C.

Telegraphic messages to Buy or Sell Railway, Mine, and other Shares and Stocks punctually attended to on commission, or at nett prices for cash, or for fortnightly settlements, with advice as to purchases or sales.

Seventeen years' experience (two in Cornwall and fifteen in London).

Bankers: Union Bank of London.

N.B.—There are several dividend mines paying 15 to 25 per cent. on current market price, with increasing prospects; also, several progressive mines on the eve of a dividend-paying state, the shares in which will, no doubt, have a great advance in price.

ANNUAL MINING REVIEW.—In my "WEEKLY MINING CIRCULAR AND SHARE LIST" of Fridays, the 3d, 10th, and 17th January, 1862, Nos. 197, 198, and 199 (Vol. IV.), will be given AN ACCOUNT OF CORNISH, DEVON, AND WELSH MINING FOR 1861, with advice as to purchases and sales of shares.

Peter Watson will visit Cornwall and Devon next or following week.

N.B.—If subscribers and clients will refer to my recommendations during the past four months of some dozen mines, they will find that they have advanced considerably, as predicted—some from 75 to 400 per cent., whilst others which I stated should be sold, have since fallen in price.

MR. LELEAN has FOR SALE, at nett cash prices, the FOLLOWING SHARES, some of which he considers very cheap indeed:—

5 Bottle Hill, 15s.
15 Charlotte United, 7½.
5 Ding Dong, £12¼ (very cheap).
50 East Treskerby, £3 (very cheap).
80 East Providence, 22s.
30 North Laxey (limited £2), all paid, 15s.
100 Nanteos, 12s. 6d.
50 Prosper United, 42s. 6d.
4 Providence, £41 (highly recommended, and safe investment).
50 Rosewarne Consols, 20s. (very cheap).
45 South Darren, £1 15s. (highly recommended)
2 St. Ives Consols, £30.
2 South Basset, £15.
25 Tolvadden, £2½.
5 Treivon Consols, £15 (highly recommended)
50 Unity Consols, 15s.
55 West Condurrow, £3½ (very cheap).
25 West Trevelyon, 30s.
13 Wheal Hearle, £15¼ (highly recommended)
50 Wheal Edward, £2.
10 Wheal Margery, £7 (highly recommended)
20 Wheal Grylls, £14 5s. (highly recommended)

Bankers: Robarts, Lubbock, and Co.

11, Royal Exchange, January 3, 1862.

JOHN RISLEY, SHAREBROKER,
32, LOMBARD STREET, LONDON, E.C.

MR. JAMES HAMMON, STOCK AND SHAREDEALER,
1, CROWN COURT, THREADNEEDLE STREET, LONDON.

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent.—Bankers: London and Westminster Bank.

GEORGE RICE, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL. BUSINESS DONE at close prices, nett, or 1¼ per cent. commission. Business in Bedford United, £5¼; Caradon Consols, £10; East Grenville, 30s. 6d. East Caradon, £29½; East Carn Brea, £10⅜; Grambler and St. Aubyn, £16½; Hingston Down, £3¾; Marke Valley, £10; North Roskear, £20½; Sortridge Consols, 11s.; Tolvadden, 40s.; Wheal Unity, 12s.; Wheal Grylls, £13½; Wheal Grenville, 35s.; West Caradon, £46.

East Caradon.—No material alteration in the values of the lodes since last week. There being, however, a scarcity of shares for delivery this account, the price closes at £29¼ to £29¾. My clients who bought at low prices can by selling at once again obtain the benefit of high prices, and realise great profits.

Money advanced on Mining Shares at moderate rates.

Jan. 3, 1862. Bankers: Bank of London.

MR. JAMES HUME, SHAREBROKER, 74, OLD BROAD STREET, LONDON, E.C.,

THE MINING SHARE MONITOR for December contains SPECIAL INFORMATION and REPORTS on WHEAL EDWARD, SETON, EAST CARN BREA, UNY, MORRIS, DRAKE WALLS, &c.

Mr. Hume has business to transact in the above mines, as well as all other legitimate shares dealt in on the market.

Commission, 1¼ per cent.

MR. R. H. M. JACKMAN, MINING AND SHAREBROKER,
2, ADAM'S COURT, OLD BROAD STREET, and BRITISH MINING EXCHANGE, FINCH LANE, CITY, E.C., has FOR SALE, at nett prices, the following SHARES:—

100 E. Budnick & Mount, 4s.
50 North Robert, 19s.
2 Grambler, £18.
90 New Frances, 3s. 6d.
40 Unity, 13s. 9d.
2 North Roskear, £22.
5 North Treskerby, £20.
2 East Basset, £53¼.
20 Edward, £2½.
50 Wheal Hope.
5 Long Rake.

And is a BUYER of—

20 Wheal Uny, £5¼.
2 South Frances, £112½.
50 Rosewall Hill, £2½.
2 Seton, £122½.
5 Wheal Reeth.
100 East Grenville.
25 Wheal Grylls, £133¾.
200 Great Caradon, 10s.
100 North Crofty, 32s. 6d.

Jan. 3, 1862. Bankers: London and Westminster, Lothbury.

BRITISH AND FOREIGN STOCK, RAILWAY, AND MINING SHARES BOUGHT AND SOLD by Messrs. FULLER AND CO., No. 26 CHANGE ALLEY, CORNHILL, LONDON. The holders of stock are invited to communicate with them, either for the purchase or sale of such stocks.

Messrs. Fuller and Co. call especial attention to the present favourable opportunity of investing in British mines, being perfectly free from risk, and paying 15 to 20 per cent. Also, in a few progressive mines, upon which 250 to 500 per cent. profit may be realised in a few months. Telegraphic messages promptly attended to.

Bankers: Bank of England.

MESSRS. FULLER AND CO., 26, CHANGE ALLEY,
CORNHILL, LONDON, are in a position to PURCHASE POYAIS BONDS and LAND WARRANTS, the holders of which are invited to submit any portion of £50,000 Five per Cent. Bonds, £250,000 Three per Cent. Bonds, and £500,000 Land Warrants. Cash paid on delivery.

MR. GEORGE BUDGE, SHAREBROKER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 15 years), has FOR SALE 25 East Carn Brea, £10 4s.; 3 Wheal Seton, £123; 2 West Caradon, £47¼; 2 East Basset; 25 East Caradon, £29¼; 55 Wheal Grenville; 40 Rosewall Hill, £7½; Hingston Down; 1 South Frances, £117½; 60 Wheal Unity, 14s. 6d.; 100 East Grenville, 35s.; 1 South Caradon; 50 Treloweth, £2; 25 Great Wheal Busy, £5¼; 1 Providence, £39½; 20 Wheal Union, 42s. 6d.; 3 Stray Park, £30⅜; 10 Wheal Grylls; Tincroft; 1 Polmear; 10 West Bryn Gwiog, £6½; 3 North Treskerby, £20; 3 New Rose, £42; 35 Wheal Moyle, £2½; 100 West South Caradon, 15s.; 150 North Nant-y-Mwyn, 3s.; 50 East Martha (£2½ paid), 24s.; 100 North Miners, 19s. 6d.; 90 Great Wheal Martha, 23s. 9d.; 100 Worthing; 125 Ribden, 4s. 9d.; 5 Smith's Wood; 2 Bryn Gwiog; 50 Lady Bertha, 13s.; 5 Billins, £19; 40 Wheal Norris, 42s. 6d.; 50 Wheal Hewett; 50 Great Treveddoe, 13s.

George Budge is a BUYER of 50 Great Busy, £4 18s.; 100 Smith's Wood; 3 South Frances, £113; 1 Devon Great Consols; 5 North Roskear; 4 Wheal Basset, £84; 3 West Sharp Tor, £45; 20 Wheal Hearle; 100 Buller and Basset.

Parties who would be induced to buy or sell shares by the recommendations contained in circulars or advertisements would do well first to submit their offers to Mr. Budge.

GEORGE MOORE,
1, CROWN COURT, THREADNEEDLE STREET.

In any business that George Moore is favoured with, in which he is the buyer, he will give CASH ON RECEIPT OF TRANSFER.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

10 Alfred Consols, 12s. 9d.
10 Anglo Mexican Mint, £15⅛.
30 Boscundle, 23s. 9d.
3 Bryn Gwiog, £26½.
2 Billins.
1 Basset, £86.
5 Bedford United, £5¼.
1 Botallack.
3 Brynford Hall, £16.
50 Cefn Cilcen, 9s. 9d.
20 Camborne Vean, 42s.
30 Carn Camborne, 16s. 9d.
2 Cargoll, £15 5s.
2 Cook's Kitchen, £29½.
10 Cuddra, 42s. 6d.
5 Clifford Amalgamated, £31.
1 Carn Brea, £77.
5 Craddock Moor, £25¾.
50 Dale, 13s.
30 Drake Walls, 19s. 9d.
2 Ding Dong, £13¾.
20 East Russell, £2⅞.
10 E. Carn Brea, £10 7s 6d
20 East Grenville, 34s.
5 East Caradon, £30.
2 East Basset, £52¼.
5 East Trefusis, £2¾.
30 Great Wheal Vor, £7.
1 Gt. Fortune, £12.
1 Grambler, £18.
30 Great Alfred, 8s. 6d.
50 Great Moelwyn (£1 15s. paid), 22s.
50 Great Crinnis, 17s.
50 Great Martha, 23s. 9d.
10 Great Retallack, 13s.
5 Gt. S. Tolgus, £3 18s 9d
60 Great Northern Copper, 25s. 9d.
10 Gonamena.
10 Hings. Down, £3 12s 6d
3 Herward United, £8.
5 Herodsfoot, £38⅛.
30 Holmbush, £1 3s. 6d.
20 Kelly Bray, 15s. 3d.
30 Lady Bertha, 12s. 9d.
30 Lady Eliza, 6s. 9d.
5 Linares, £7 5s.
5 Long Rake, £14.
10 Ludcott, £2⅜.
30 Molland, 6d.
10 Marke Valley, £10.
2 Mary Ann, £16 5s.
50 North Minera.
5 No. Basset, £2 17s. 6d.
1 No. Treskerby, £18¾.
20 North Downs, £4 16s 9d
50 North Rhine.
5 Old Tolgus.
2 Providence, £42½.
10 New Frances, 3s 9d.
20 North Phœnix, £4¼.
50 North Rhine, 11s. 6d.
1 No. Roskear, £23¼.
10 North Buller, £3.
20 North Robert, 18s. 9d.
50 North Hafod, 10s.
10 North Crofty, 39s.
5 Par Consols, £7 17s. 6d.
10 Prosper United, 41s. 9d.
20 Port Phillip, 30s.
2 Rosewarne Utd., £18 15s
20 Rosewall Hill, &c.
30 Ribden, 4s.
20 St. John del Rey, £32.
2 Stray Park, £30⅛.
1 St. Ives Con., £29.
50 Sortridge Cons., 11s. 9d.
1 South Caradon, £318¾.
5 St. Day, 10s. 6d.
5 S. Bryn Gwiog, £5¾.
1 S.Wh. Frances, £116⅛
5 Silver Rake, £8¾.
10 So. Carn Brea, £4½.
20 So. Condurrow, 9s. 9d.
2 South Basset, £12½.
2 Trelawny, £16⅞.
30 Tamar Con., £1 3s. 9d.
5 Tincroft, £8.
25 Tolvadden, £17⅛.
20 Treloweth, 26s.
20 Tees Side, 3s. 6d.
50 United Mexican, £3½.
50 Vale of Towy, 4s. 6d.
W. R. Down, £10⅝.
5 West Stray Park, £3¾.
20 Wheal Unity, 13s. 6d.
1 West Seton, £290.
5 West Basset, £14⅜.
50 Worthing, 11s.
2 Wendron Con., £10⅞.
20 Wh. Grenville, 37s. 3d.
30 Wheal Crebor, 9s. 6d.
10 Wh. Edward, £2 5s.
50 West Polmear, 6s.
1 West Sharp Tor.
20 West Tolcarne, 6s. 6d.
20 Wheal Moyle.
30 W. So. Caradon, 17s 9d
2 West Caradon, £47½.
5 Wheal Grylls, £13¾.
5 Wheal Hearle.
2 West Bryn Gwiog.
50 West Wendron, 2s. 6d.
30 West Silver Bank, 20s.
1 Wheal Seton, £173.
20 Wheal Norris, £2 8s 9d
10 Wheal Union, £2½.
30 Wheal Arthur, 12s. 9d.
10 Wheal Uny, £5 12s 6d.
1 Wheal Margaret, £41.

And is a BUYER of 100 Rosewall Hill and Ransom United, 20 St. John del Rey, 5 Providence, 30 West South Caradon, and 20 Hingston Down.

2, Adam's-court, Old Broad-street, Jan. 3, 1862.

MESSRS. VIVIAN AND REYNOLDS, 68, OLD BROAD STREET, LONDON, E.C., MINING ENGINEERS, INSPECTORS of MINES, COMMISSION, and GENERAL AGENTS for the PURCHASE or SALE of MINE SHARES, RAILWAY, and EVERY OTHER DESCRIPTION of STOCK.

Commission on share transactions, 1¼ per cent. on £10 and above, and 2½ per cent. or less sums.

MR. C. POWELL, MINE SHAREBROKER,
2, SPREAD EAGLE COURT, FINCH LANE, LONDON, E.C.

C. Powell has selected the undermentioned dividend and good progressive mines, which he recommends, either for investment or speculation, and begs to draw particular attention to those marked*, which can be readily bought or sold at close prices:—

* Bryn Gwolg.
Carn Brea.
Cook's Kitchen.
Devon Great Consols.
* East Caradon.
* East Carn Brea.
* East Grenville.
Herodsfoot.
* Long Rake.
* Marke Valley.
* North Downs.
North Roskear.
* North Minera.
North Frances.
* Providence.
South Caradon.
* South Frances.
South Carn Brea.
* Sortridge Consols.
St. Day United.
Tincroft.
* West Caradon.
* Wheal Grylls.
* Wheal Grenville.
Wheal Norris.
* Wheal Seton.
Wheal Mary Ann.
* Wheal Trelawny.
Wheal Union.
* Wheal Uny.

C. Powell's office adjoins the British Mining Exchange, which enables him to act promptly on all orders with which he is favoured, either by post or telegraph.

Commission, 1¼ per cent.

Bankers: City Bank, Finch-lane.

MR. EDWARD COOKE, SHAREBROKER,
5, HERCULES PASSAGE, near the Stock Exchange, London, TRANSACTS BUSINESS for principals in RAILWAY, MINE, BANK, and INSURANCE SHARES, &c., at the usual Stock Exchange rate of commission, and from the contiguity of his office to that institution he is enabled to operate promptly on all orders entrusted to his charge, either by telegraph or post. FOR SALE, at nett prices:—

2 West Caradon, £48.
10 Tincroft, £7 18s. 9d.
25 Great Caradon, 7s. 6d.
50 New So. Caradon, 6s. 9d.
50 Great Retallack, 14s.
5 Clifford Amal., £29½.
10 East Carn Brea, £10½.
10 Wheal Grylls, £14½.
20 Wheal Moyle, £2½.
10 Wheal Grenville, £17⅜.
15 East Grenville, £15⅜.
2 Bryn Gwiog, £26½.
40 No. Hafod (10s. pd.), 5s
50 St. Day United, 10s. 6d.
25 North Downs, £4¾.
30 Sortridge Cons., 12s. 6d.
5 Wheal Hearle, £16¼.
25 Wheal Norris, £2 6s.
5 Wheal Emily Henrietta, £5.
10 United Mexican, £3¾.

BUYER of Wheal Grylls, East Caradon, East Carn Brea, and West Caradon, at the current market price.

A Map of New South Caradon, together with reports from Capt. Johns, of West Caradon, and others, sent on application.

Jan. 3, 1862. Bankers: London and Westminster, Lothbury.

MR. GEORGE BATTERS, of No. 5, COWPER'S COURT, CORNHILL, DEALER in BRITISH MINING SHARES and OTHER SECURITIES, from long experience in all mining stocks, can advise as to investment of capital at closest market prices.

Mr. Batters has special business in East Caradon, South Caradon, Marke Valley, East Carn Brea, &c., and strongly recommends his clients to eschew mythical concerns, where the only mining is in the pockets of the unwary, and to buy such shares as above enumerated, that at all times are marketable, and out of which the vendor can only obtain a reasonable commission.

East Carn Brea shares may be expected shortly to sell at double or treble the present quotations of about £10¼ to £10⅜. Ore ground is discovered sufficient to return in profit all that the shares are now selling for, and the reserves are being increased at the rate of about 500*l.* per month: 200 shares for sale at market price, or any number bought at a small marginal difference.

MR. BATTERS has SPECIAL BUSINESS in the SHARES of EAST CARADON, MARKE VALLEY, BILLINS, and EAST CARN BREA.

MR. T. ROSEWARNE, 75, OLD BROAD STREET,
LONDON, E.C., has BUSINESS TO TRANSACT in—

Clifford Amalgamated.
Cook's Kitchen.
Drake Walls.
East Caradon.
East Russell.
East Carn Brea.
East Grenville.
Great Retallack.
Hingston.
Herodsfoot.
Grambler and St. Aubyn.
Lady Bertha.
Long Rake.
Marke Valley.
North Downs.
North Robert.
North Minera.
Sortridge Consols.
Stray Park.
Wheal Grenville.
Wheal Grylls.
Wheal Arthur.
Wheal Edward.
Wheal Norris.
Wheal Seton.
Wheal Harriett.
Wheal Unity.
Wheal Moyle.
West Sharp Tor.
West Caradon.

Orders per post or telegraph promptly attended to.

January 3, 1862. Bankers: Bank of London.

CARN BREA.—TWO SHARES FOR SALE, at £75 per share.
Apply to Mr. John Hoyle, 14, Cornhill, London, E.C.

MR. J. SYKES, LEEK, STAFFORDSHIRE,
is in a position to DEAL SPECIALLY in RIBDEN and DALE SHARES. Reliable information.

FOR SALE:—50 Dale, 13s. 6d.; 150 Ribden, 4s. 9d.; 10 Great Retallack, 17s. 6d.; and 10 Wheal Moyle.

BUYER of Dale, Ribden, Lady Bertha, North Robert, Wheal Grenville.

Money advanced on good mining shares, at 10 per cent. per annum.

Bankers: Leek Bank.

MR. MURCHISON'S REVIEW OF BRITISH MINING FOR THE QUARTER ENDING 30TH MARCH, 1861, is NOW READY.
Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE.

SALE OF MINING SHARES BY PUBLIC AUCTION.

MR. T. P. THOMAS'S NEXT SALE of MINING SHARES will take place at Garraway's, on Thursday, the 16th of January next. Persons desirous of offering shares for sale must give notice of same at the offices of the auctioneer, 2, Crown-court, Threadneedle-street, London, E.C., on or before the 9th of January.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 16, HACKINS HEY, LIVERPOOL.

Mr. Thomas has had placed in his hands FOR SALE a number of SHARES in the MOUNT PLEASANT LEAD MINE, near Mold, a mine likely to be much richer than at present, but which now pays in dividends a much larger percentage than any other mine in the list. Prices and particulars on application.

JOHN R. PIKE OFFERS the undermentioned SHARES at the prices quoted, FREE OF COMMISSION:—

5 Bryn Gwiog, £26 10s.
50 Bottle Hill, 11s. 9d.
25 Brynfail.
100 Calstock Cons., 6s.
10 Cook's Kitchen, £29¼.
2 East Basset, £53 10s.
20 East Carn Brea, £10¼.
4 Gram. & St. Au., £18¾.
5 Gt. Wh. Fort., £12½.
50 E. Rosewarne, £1 3s. 6d.
20 East Trefusis, £1 10s.
50 Gt. Retallack.
50 No. Downs, £4 13s. 9d.
5 North Roskear, £31¼.
50 North Robert, 17s. 9d.
4 Providence, £40½.
100 Sortridge, 11s. 9d.
4 Stray Park, £30⅛.
25 Treloweth, £1 6s. 6d.
4 West Caradon, £47½.
2 Wheal Basset, £86.
100 Wh. Grenville, 37s. 6d.
100 Wh. Edward, £2 3s 9d.
2 Wh. Margaret, £41.
4 Wh. Mary Ann, £16¼.
10 Wheal Grylls, £13¾.
100 Wheal Unity, 14s.

Mr. Pike will be happy to insert any shares in his list free, unless sales are effected, when a commission of 1¼ per cent. will be charged.

Shares bought or sold for the fortnightly or monthly accounts.

3, Plange's-court, Old Broad-street, London, E.C., Jan. 3, 1862.

NOTICE OF REMOVAL.

MR. FREDERICK WILLIAM MANSELL,
MINING SHAREBROKER.
On and after the 21st of December,
OFFICES at 75, OLD BROAD STREET, LONDON, E.C.

MR. J. S. PHILLIPS, C.E. AND M.E., SHAREBROKER, &c.
7, GEORGE YARD, LOMBARD STREET, LONDON.

London office for North Porthilly, and North Pool Mines. Shares should be bought in the former.

MR. F. LISABE, C.E. AND C.M.E., may be consulted by letter addressed to No. 38, GLOUCESTER CRESCENT, REGENT'S PARK, N.W., or personally at his office, No. 25, MOORGATE STREET, CITY, upon all matters connected with mining.

MR. THOMAS SPARGO, MINING ENGINEER,
STOCK AND SHAREBROKER,
224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.
Commission, 2½ per cent.

MESSRS. THOMAS PENROSE and THOMAS PRICE UNDERTAKE ASSAYS and ANALYSES of EVERY DESCRIPTION of MINERAL PRODUCT, FUEL, and MANURES, at Messrs. Richardson and Co.'s Assay Office and Laboratory, Copper Ore Wharves, Swansea.

RICHARD CLIFT, MINE SHAREDEALER,
late of Redruth, now 48, THREADNEEDLE-STREET, LONDON, where all letters are to be addressed.

MR. JOSEPH GREGORY, MINING OFFICES, 2, GREAT ST. HELEN'S, BISHOPSGATE STREET, E.C.

Bankers: City Bank, Threadneedle-street.

Commission on purchase and sale of shares, 1¼ per cent.

OFFICE OF REFERENCE FOR THE BRYNAMBOR LEAD MINING COMPANY CARDIGANSHIRE.

MESSRS. R. HORLEY AND CO., SWORN STOCK, SHARE, and MINING BROKERS, 45, CORNHILL, E.C. (late of 2, Royal Exchange-buildings), TRANSACT EVERY DESCRIPTION OF MINING BUSINESS, on commission only, and are in a position to obtain reliable information respecting all dividend and progressive mines.

N.B.—Messrs. Horley and Co. publish a Weekly Mining List, with the closing prices every Wednesday, and will be most happy to forward the same (gratis) on application.

WILLIAM SEWARD, MINING BROKER, STOCK AND SHAREDEALER, 26, THROGMORTON STREET, LONDON, E.C.
Commission, 1¼ per cent. on £100 and above, and 2½ per cent. on less sums.

JOHN GLEDHILL AND CO., MINE AGENTS AND SHAREBROKERS, MINING OFFICES, CORN EXCHANGE, LEEDS.

MR. M. GILDROY STEWART, CONSULTING MINING ENGINEER,
COLLIERY VIEWER AND SURVEYOR,
INSPECTOR AND VALUER OF MINES AND MACHINERY,
BEDMINSTER, BRISTOL.

WEST BASSET.—TWENTY SHARES FOR SALE, at £13⅛ per share.—Apply to Mr. John Hoyle, 14, Cornhill, London, E.C.

DEVON NEW COPPER MINING COMPANY (LIMITED).—THREE HUNDRED SHARES (£2 paid) TO BE SOLD, at £1 per share.—Apply to Messrs. Ellis and Co., 2, Royal Exchange-buildings.

WANTED, a SITUATION as COLLIERY MANAGER or AGENT, by a middle aged man, strong and active, who has been connected with collieries in Lancashire from a youth, and in the above capacities about 15 years. A good surveyor, planner, &c. Satisfactory references.—Address, "H. Z. J.," Post-office, St. Helen's, Lancashire.

WANTED, TWENTY FATHOMS of 9 inch PUMPS.
Apply to George Rickard, Wenford, Bodmin.

WANTED, a SIGHT of the MINING JOURNAL regularly.
Address, "A. R.," Post-office, Storrington, Sussex.

£1500 TO £2000 WANTED as LOAN, on SECURITY of PLANT, MACHINERY, and LEASE of a COLLIERY. The present works have cost about £10,000, and the above sum is required for the erection of additional machinery; 8 per cent. interest will be paid for an immediate advance. None but principals treated with.—Apply by letter, to Box 220, Post-office, Bristol.

VALUABLE COAL FIELD TO LET, in one of the best situations in GLAMORGANSHIRE.—Apply to "A. B.," Post-office, Bridgend.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, both in cost and in working, as well as the MOST DURABLE and EFFICIENT MACHINE made. Complete machine, capable of washing from 25 to 50 tons per diem (according to quality), £75.—Full particulars, testimonials, &c., may be obtained from E. Edwards, Esq., C.E., Beaufort-buildings, Strand, London.

A Model may be seen at Mr. Edwards's office, Beaufort-buildings.

GREAT TREGUNE CONSOLS MINE.—A SPECIAL GENERAL MEETING of the shareholders will be HELD at the office of the company, 14, Cullum-street, E.C., on TUESDAY, the 14th of January, at Twelve o'clock precisely, to take into consideration the disposal of the remaining shares of the last issue.

The Lord Chancellor's recent judgment in favour of the company will be laid before the meeting. By order of the Board, CHAS. PEARSON, Sec.

TO THE SHAREHOLDERS OF THE COMPANY OF PROPRIETORS OF THE ROYAL CONSOLIDATED COPPER MINES OF SAN FERNANDO, CUBA (LIMITED).—Notice is hereby given, that a GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, London, on WEDNESDAY, the 15th day of January instant, at Two o'clock precisely, for the purpose of confirming a Resolution passed at a General Meeting of the company held on Friday, the 6th day of December last, by adjournment from the day preceding, by which the liquidators were authorised to accept the sum of 500*l.* in full settlement of all claims by the company upon a shareholder, in respect of the last call of 5*l.*

CUNME. BORTHWICK
THOMAS CLOSE
WALTER SHARP
W. D. STARLING
} Liquidators.

Dated January 1, 1862.

MINING JOURNAL

THE PROGRESS OF MINING IN 1861.

BY J. Y. WATSON, F.G.S.

BEING THE EIGHTEENTH ANNUAL REVIEW.

[CONTINUED.]

COOK'S KITCHEN sold this year copper, 181*l.* 4s. 10d.; tin, 16,261*l.* 4s.: total, 16,442*l.* 8s. 10d.; and divided 1592*l.* 10s., or 13s. per share. The mine has been worked continuously for more than 100 years, and in former times yielded 2,000,000*l.* sterling. Like Dolcoath, adjoining, it was at that time a copper mine; but is now selling about 20 tons of tin a month. The mine is very deep (200 fathoms), and the profits will depend a good deal upon the price of tin. The mine, until this year, had not paid a dividend for 51 years.

CRADDOCK MOOR has sold 1750 tons of copper ore this year, amounting to 13,885*l.*, against 1501 tons and 11,985*l.* in 1860. The dividends have been 1582*l.* 10s., against 1002*l.* in 1860. Since the commencement of the mine, a few years ago, there has been paid for labour 48,505*l.* 16s. 4d.; materials, 17,772*l.* 10s. 11d.; lord's dues, 3955*l.* 4s. 2d.; and 5960*l.* paid in dividends. The calls originally made amounted to 14,837*l.* 9s. Total returns of copper ores 62,941*l.* 8s. 6d. The mine adjoins West Caradon, and the principal points of interest, and from which profitable results may soon be expected, are on Menadue and Gilpin's lodes. A level (96) is now driving west, at 4*l.* 10s. per fm., on the course of the former, which is immediately below where it made so productive in West Caradon; the lode here has a very promising appearance, containing rich stones of copper ore, but not in sufficient quantities to value: strong hopes are entertained that good shoots of ore will be met with in driving west. The level is about 30 fms. below the 27 fm. level in West Caradon, and the lode will pass through the sump-shaft a few fathoms below the 96. A cross-cut is driving north at the 62, towards the latter (Gilpin's) lode, and will probably reach it in two or three months; this lode where seen in the 42 (about the depth of West Caradon adit) shows strong indications of making ore in depth, now producing about 1½ ton of copper ore per fm. About 180 fms. west of this point, and on the same lode, a new shaft is being sunk, where rich stones of copper ore and gossan of the finest description have been met with. This appears to be a very important part of the mine, and there is a probability of finding large deposits of ore here shortly. An arrangement is expected to be made with Caradon Consols adventurers for continuing their cross-cut north, to cut some lodes passing through their sett further west, and then to hole to the shaft last alluded to. Wheal Norris adventurers are working on some very promising lodes near the western boundary, and the discoveries which they may make will throw a beneficial light on that part of this sett.

FALMOUTH AND SPERRIES has sold gossan 2679*l.* 17s. 2d.; lead, 242*l.* 3s. 3d.; mundic, 10,016*l.* 10s. 3d.; copper, 93*l.* 12s. 2d.; tin, 6*l.* 19s. 8d.: total amount, 13,039*l.* 2s. 6d., and has divided 1000*l.* As will be seen from the returns, the mine is neither of copper, tin, nor lead, but depends chiefly on the price of mundic.

FRANK MILLS, Christow, Devon, has sold in the year 961 tons of lead for 14,301*l.* 16s. 10d., and has paid in dividends 3500*l.*; but, as 1500*l.* has been retained for a reserve fund, the profits have been 5000*l.* The chief supplies have been derived from an immense deposit of lead in a lode from 30 to 50 ft. wide, very soft and sandy, and troublesome to work, as a very large pond was over the surface; but Lord Exmouth has kindly sacrificed his pond and fish, and the view of it from his mansion, rather than danger should arise to the workmen. The mine is still making profits, and likely to continue to do so.

GREAT WHEAL FORTUNE has sold this year 188 tons of tin ore, for 14,163*l.* 13s.; 8 tons of copper, 68*l.* 18s. 10d.; mundic, 14*l.* 12s., and has divided 10s. per share (889*l.*, against 899*l.* in 1860). The mine is understood to have improved during the year; but much will depend upon the future price of tin.

GREAT WHEAL VOR has paid this year 3692*l.* 10s., or 12s. 6d. per share, in dividends, and at the last meeting, in Dec., there was a balance in favour of the mines of 3399*l.* 16s. The mines are looking well, returning about 1500*l.* worth of tin a month, at a cost of about 1100*l.*, and at the next meeting another dividend will be declared.

GUNNIS LAKE—At the meeting of the adventurers, on the 22d, a dividend of 1s. 6d. per share (750*l.*) was declared. The books are balanced up to the end of October. All the new machinery charged, the 40-feet wheel, grinder, stamps, buildings, new dressing-floors, and road, as well as all merchants' bills, leaving the mine free of debt to that date, with a cash balance of a little over 1000*l.* The adit level will give near 100 fms. of backs, and one end, laying open good ore ground, is now within 30 fms. of the engine-shaft, which is down 46 fms., and a good lode of grey ore in it. As soon as this communication is effected, various levels will be extended from this shaft, and a good quantity of ore ground set on tribute.

HERODSFOOT has paid this year 5632*l.*, or 5*l.* 10s. per share, against 4096*l.* in 1860. The lead is very rich for silver, but, as I cannot obtain any information either as to the state of the mine or the returns, I can only say that, when there is anything particularly good, agents seldom wish it kept under a bushel.

NORTH DOWNS has sold 1499 tons of copper ores for 12,249*l.* 4s. 2d., and divided 2250*l.*, or 7s. 6d. per share. The mine is reported as looking well, and the chief point of interest is the discovery in the 60 fm. level, east of King's shaft, of the rich course of ore gone over in the 50.

NORTH GRAMBLER has sold 434 tons of copper ore for 3581*l.* 6s. 7d., and paid a dividend of 10s. per share (683*l.*) early in the year. At the Oct. meeting the profit on three months was not above 80*l.*, and the balance in hand 260*l.* 17s. 5d. On the south lode very little seems doing, and on the north lode a few pitches are working at prices varying from 1s. 3d. to 11s. in the 1*l.*

TINCROFT has sold 2129 tons of copper ore this year for 7225*l.* 3s. 5d., and 267 tons of tin for 18,087*l.* 17s. 1d., and divided 4500*l.*, against 1500*l.* in 1860. The price of tin must have affected the profits this year, and in regard to its prospects for the future I have not been able to get any report.

WEST BASSET sold this year 6001 tons of copper ores for 35,821*l.* 8s. 1d., and divided 11,400*l.* (1*l.* 18s. per share), against 18,600*l.* in 1860. The mine is comparatively young, having commenced profits in 1854, and has paid altogether 130,000*l.* in dividends upon a small outlay. The present company bought mine and materials for 800*l.*, and saw it soon afterwards at a value of 180,000*l.* That part of the mine from which the great riches have been taken is now poor, but in the western ground, towards Wheal Grenville, a new shaft, called Grenville, has been sunk, and an engine of 70-in. cylinder erected upon it. Here a good discovery has been made, and a new mine may be opened out. The lode in the shaft, 4 fms. below the 94, is worth 6 to 7 tons of ore per fathom. The 50 west has also improved to 2 tons per fm. The dispute which has now cost in law many thousands of pounds on both sides, and to which I referred under the head of South Frances, I allude to again here, in the hopes that all personal feelings may be set aside, and some amicable arrangement made for the benefit of the shareholders as a body. Otherwise, it will be the old story of the lawyers over again, and the "oyster" in this instance is worth some 30,000*l.*

WEST CARADON has sold 3451 tons of copper ore for 32,854*l.*, against 39,711*l.* 16s. 6d. in 1860, and has paid 10*l.* per share, or 10,240*l.* in dividends, against 14,336*l.* in 1860. Early in the year—in Jan. and May—the dividends were 2*l.* 10s. per share, but in Sept. declined to 10s., and in Nov. 1*l.* The mine has been comparatively poor during this period, and discoveries are looked for to keep up the dividends. Of late the prospects have improved, and a large amount of tutwork is being carried on, especially in the western ground, for discoveries.

WHEAL BULLER has sold 1272 tons of copper ore for 7672*l.*, and tin, 143 tons, for 10,118*l.* 3s. 4d. Up to May the mine paid 1536*l.* in dividends, but none since. The mine commenced dividends in 1849, and has paid altogether 244,678*l.* At present the mine is poor, but in a good district for discoveries. The levels west on Stevens's lode are producing their usual quantity of ores, but the lode is small. An improvement is anticipated in the deeper levels driving east on the tin lode. There has lately been one in the 90 fm. level, and, in consequence, the sinking of Kistler's shaft has been resumed.

WHEAL JANE has sold this year mundic, 2282*l.* 8s. 2d.; tin, 9139*l.* 16s. 2d.; lead, 803*l.* 3s. 1d.; total, 12,225*l.* 7s. 5d., and divided 512*l.*, or 1*l.* per share, against 512*l.* in 1860. This mine, like Falmouth and Sperries, depends in a great measure upon the price of mundic, but produces more tin.

WHEAL LUDCOTT sold this year 606¼ tons lead ore for 9571*l.* 10s. 10d., silver 22 tons, for 1645*l.* 8s. 7d., and paid 1920*l.*, against 3840*l.* in 1860. The various points in the mine continue productive, and it is expected the returns of 1862 will equal the past years. During the year Wheal Wrey Mine and machinery have been purchased by the Ludcott Company, and to pay for which the dividends will be suspended for nine months. The prospects for silver are good, and a sale will take place early in the year.

WHEAL MARY ANN has sold this year 1141 tons of silver-lead ore for 22,019*l.* 2s. 5., and divided 2048*l.*, against 4096*l.* in 1861. The prospects of the mine have improved of late, and great interest attaches to cutting the lode south of the slide, which would be in whole ground for more than 100 fathoms long.

WHEAL SETON has sold this year 2289 tons of copper ore for 11,197*l.* 5s., and divided 534*l.*, or 1*l.* 10s. per share. The mine first paid a dividend in 1850, and to the end of 1857 paid 30,701*l.* In 1858, *nil.*; in 1859, 2366*l.*; in 1860, *nil.* It will thus be seen that the mine has been an uncertain one, but improvements have lately taken place, and lead to the expectation of good dividends in 1862.

WENDRON CONSOLS have paid this year 1024*l.*, against 3584*l.* in 1860. Last year a full report was sent me, and the mine was looking well—this year no notice has been taken of my applications.

The pamphlet, comprising the Introductory Matter, with all the Dividend and Progressive Mines, will be ready on Tuesday next, and can be had, price 1s., at the *Mining Journal* office; of all booksellers; and of Messrs. Watson and Cuell, St. Michael's-alley, Cornhill.

Original Correspondence.

COMBUSTION OF FUEL.

SIR,—Your, as usual, interesting *resumé* of Scientific News of last week contains a paragraph under the above title. Permit me to inform you that this alleged American discovery has already (as is so frequently the case) been anticipated in England. The English inventor is the Hon. Major Fitzmaurice, whose patent, embodying, substantially, this invention, was secured and specified some time ago. The well-known practical experience of Major Fitzmaurice in steam generation, and in the construction of marine boilers, enabled this gentleman to perceive how great the advantages would be of any plan that should carry with it the elements of combustion in the form of air (that is, of oxygen) combined with the elements of water, under the conditions involved in these operations. A reference to Major Fitzmaurice's patent will show that Mr. Tiffany, of New York, has been completely anticipated by the discovery and patents of Major Fitzmaurice.—*Jan.* 1. CHRISTOPHER BINKS.

RATING OF MINES AND COLLIERIES.

SIR,—I have carefully read the remarks of your correspondent upon the rating of mines, but entirely disagree with him as to any change in the law being required. Except in a few isolated instances, where, perhaps, personal differences interfere, I think the assessors and assessed get on pretty well together, and I am sure that the colliery owners would not be benefited by any change likely to be introduced. Few coalowners regard it as a hardship that they have to pay poor and highway rates, though many naturally feel annoyed that collieries should be taxed and metallic mines exempted; but it is so hopeless a case to expect that the exemption of collieries would be carried, that I think it may rather be said "the opinon seems universal" that it is better to let well enough alone.

If any change be necessary, I admit that the basis for the rate which your correspondent points out is the correct one; but the present mode of settling the tax, by a mutual understanding, is far preferable to any other. As, however, some metallic mines are taxed, as I learn, it would probably be to the advantage of metallic mines in the districts where the tax is paid, but for British mines generally (not to follow the example of your excellent correspondent Mr. J. Y. Watson, who, I observe, excludes Welsh, Irish, Durham, and Derbyshire mines, as well as those in Anglesey and the Isle of Man, from the category of British mines), I say let the law remain as it is, for the only probable alteration would be to levy an equal tax both upon collieries and metallic mines. MONA.

VENTILATION OF COLLIERIES.

SIR,—Your correspondent, "M. E.," calls upon me to describe my system of ventilation, and I do not think I can better comply with his wish than by beginning at the surface. Firstly, I propose to have two air-holders (similar in shape to gas-holders), which may work in water. By thus arranging them in pairs, so that one may be rising and re-filling with air, whilst the other is falling and forcing the air into the mine, I am enabled to produce the greatest possible effect with the smallest possible power. The air passes from the descending holder into a large main pipe, which conducts it to the bottom of the shaft. From the lower extremity of this main the air is carried through as many smaller mains as there are main levels communicating with distinct districts in the mine—these smaller mains are carried to the ends of the principal levels, and in the same way branches are taken out to supply the several working places in the vicinity of which the mains pass. These pipes I propose should be made of sheet-iron, with Smith and Phillips's patent band joints—this would admit of large pipes being employed at a moderate cost, and would enable two boys or men to make sound or take apart the pipes with the greatest ease; it would simply be necessary to lay down additional lengths of pipes as the levels are extended.

A good deal has been said of late about the size of air-ways and speed of air; and upon this point I may remark that I believe my system will provide an effectual remedy, even where circumstances render all others inapplicable. If "M. E." had given my plan a thought, he would at once have perceived that one great advantage which it possesses is that the air being in pipes, and under pressure, it would travel at many times the speed of the old system; and that when necessary the speed could, by slightly increasing the pressure, be considerably accelerated. Indeed, the advantage which the system derives from this circumstance alone would enable a small pipe to supply more air than many of the larger air-ways now in existence; and it is not alone in securing a better supply of air that I claim superiority for my invention, for assuming an ample supply of air to be led into the mine by the means I propose, it will be obvious that no air-doors will be required, nor boys to attend to them; and that all possibility of fire in a mine will be removed, as nothing of an inflammable nature, such, for example, as wood or canvas bratticing, will be necessary. Again, there will be no building in of old workings to form gas-holders, which sooner or later are almost sure to blow up; and even if the pipes were left in so that the old workings might continue to be ventilated so long as the mine was worked, I believe their value would be less than the amount which is now frequently paid for building the so-called permanent stoppings. Upon my system one shaft is sufficient; and, so far as the comfort of the men is concerned, the old and new systems can scarcely be compared. Instead of working, as at present, in hot foul air, usually damp and unhealthy, there will be in every working a dry, cool atmosphere, alike pleasant and wholesome, for the passage of the air through the pipes both dries and cools it, without altering its purity, which is equal to that of the surrounding hills above. And lastly, the expense of safety-lamps would be avoided, as well as that of the men to attend to them, for the safety-lamp would never be required except by the fireman when examining the state of the working places before the men commenced work. RICHARD HUGH HUGHES.

Atlas Works, Hatton-garden.

STEAM ON COMMON ROADS—TRACTION ENGINES.

SIR,—In reply to the remarks of your correspondent, "F. S.," on the subject of traction-engines, I will endeavour by a few calculations to show him that even four-horse loads can be conveyed cheaper by steam than by horse-power. An engine weighing about 12 tons, two cylinders 9 in. diameter, 1 ft. 6 in. stroke, steam 60 lbs. pressure, will draw on a level road at 4½ miles per hour 100 tons gross; and at 3 miles per hour, up an inclination of 1 in 10, 80 tons gross, by a consumption of 11 bushels of coal. The cost for 4½ miles, or one hour, is as follows:—

11 bushels of coal	11s.	0d.
Wages	1	6
Oil, grease, &c.	0	6
Wear and tear (6d. per mile)	2	3
Interest on cost for 1 hour, 6 hours being equal to 1 day.. for 1 hour, or 80 tons conveyed 4½ miles.	1	3 = 16s. 6d. cost

Then, on an average road 80 tons gross, or 50 tons nett, carried 4½ miles costs 16s. 6d., which gives us cost of carrying 1 ton 4½ miles 4d., against 3s. 9d. by horses, taking horse draught at an average of 9d. per ton per mile, showing a reduction of 10-11ths, leaving a large margin for the rate of horse-draught, if I have put it too high, but as "Young" gives 1s. per ton per mile as the cost, I cannot think I have. By reducing the steam-pressure from 60 lbs. to 23 lbs., and, consequently, the consumption of coal from 11 to 4½ bushels per hour, other expenses remaining unaltered, even this heavy engine may be made to convey 20 tons gross, or 5 tons nett, (the load of four horses), for 10s., which makes the cost of carrying 1 ton 4½ miles as 2s., against 3s. 9d. by horses, showing a reduction of 7-15ths.

But by the use of a smaller engine, built for light work, weighing about 5 tons, 6 in. cylinder, 12 in. stroke, 20 lbs. steam-pressure, consuming 1¼ bushel of coal per hour, and moving at 3 miles per hour, the cost for 3 miles, or one hour, is as follows:—

1¼ bushel of coal	1s.	6d.
Wages	1	6
Oil, grease, &c.	0	4
Wear and tear (4d. per mile)	1	0
Interest on cost	0	8 = 5s. 0d.

Then, cost of conveying 12 tons gross, or 5 tons nett, 3 miles being 5s., makes the cost of 1 ton carried 3 miles as 1s., against 2s. 3d. by horses, showing a reduction of 5-9ths in favour of steam over horses. This small engine, by raising the steam-pressure from 20 lbs. to 80 lbs., would take on an average road 40 tons gross.

I would also call your correspondent's attention to the advantage of the use of an endless railway, on a principle similar to Boydell's, especially in passing over bad roads, or soft or ploughed ground, as far less injury results from the pressure of the endless railway than from the feet of horses. A draught horse weighs on an average 15 cwts., and the bearing surface of its foot is equal to 15 square inches; when in motion it bears upon two feet only at a time, consequently each square inch of its feet must bear upon the ground with a pressure of 56 lbs. The four shoes, or bearing surfaces, of the endless railway of an engine of 12 tons would be equal to 1536 square inches, which will give 17½ lbs. pressure per square inch of the engine upon the ground, against 56 lbs. per square inch of a horse's foot; but supposing that 5-6ths of the whole weight of the engine is borne by the driving-wheels, the greatest pressure of the engine upon the ground is only 21½ lbs. per square inch. Should "F. S." be connected with the mining interests, or wish for further information, I will answer any applications addressed as under.—448, *West Strand, Jan.* 1. JOHN MARSHALL.

COAL MINING IN THE FOREST OF DEAN.

THE ATLAS COAL COMPANY (LIMITED).

SIR,—Statements of a nature highly injurious to the interests of this company having appeared in the Journal of Dec. 21, I am authorised by the directors to contradict such statements, as being utterly false, and at the same time to state that a complete refutation of those malevolent assertions will be ready for your Journal of the 11th inst.

Moorgate-street, Jan. 2. ARTHUR MAYOR, Sec.

PRATICAL MINING—"JIGGING."

SIR,—In the Journal of Dec. 28 an article appears in reference to Mr. Edwards's jigging machine, from which I copy the following:—"The water, when in operation of jigging, is not permitted to run to waste, as it is when Petherick's or Hunt's machines are used." Now, this is in direct opposition to the fact; and, to say the least of it, is very unfair, as one of the important features in Mr. Hunt's machine is the facility given for using the water over and over again when required, and this was secured in his patent, about five years before the date of Mr. Edwards's patent. For the interest of all concerned, this error should be corrected. A PATENTEE.

NATURAL SALT AND GAS SPRINGS IN NORTH AMERICA.

SIR,—On the banks of the Kanawha River, where it intersects the mountains of Western Virginia, these springs more or less abound. A few years ago, the proprietor of one of the saltworks on the banks of this river continued to bore or drill into the rocky substrata of the earth to the depth of about 1000 feet, for the purpose of obtaining a greater strength of brine in the springs. Whilst continuing the operation of drilling, the steel chisel sudddenly broke through a stratum of rock into a cavity beneath it. Instantaneously a powerful torrent of air and brine, intermingled, gushed upwards with great violence, jetting into the air like the water discharged from the pipe of a fire-engine. Astonished at the appearance of so much air mixed with the up-rushing brine, one of the workmen applied a light to it, to ascertain if the air were inflammable. The fountain then flashed up into a lofty jet of flame, like that of an immense gas-burner, presenting to the sight the extraordinary appearance of a *jet-d'eau* of sparkling spray, commingling with wreaths of dazzling flame.

The timber framing for the boring apparatus was speedily burnt, and every attempt to extinguish the flame having proved unsuccessful, the proprietor began to despond, instead of rejoicing at the result of his labours. At the suggestion of one of the workmen, the end of a pipe was placed in an erect position over the orifice of the dril-hole, and then dextrously removed, whereby the continuity of the streams of gas was broken, and the flame thus readily extinguished: 2400 bushels of salt were obtained weekly from the brine of these works, and it is spontaneously discharged into a huge boiler, and is then evaporated by the combustion of the gas (carburetted hydrogen gas) spontaneously discharged through a tube into the furnace beneath it. The jet of gas from these first borings exhausted itself in three or four years, but many other borings have since been made from which renewed supplies of gas have been obtained. Another of these extraordinary gas and salt springs has just been discovered at Wellsville, in Columbiana county, Ohio, of which the following description is given in the *Boston Advertiser* of the 4th inst.:—

AN EXTRAORDINARY GAS AND SALT WELL.—One of the most extraordinary salt wells on record, perhaps, is that now being operated on at Wellsville, in Columbiana county, Ohio. The well was sunk in anticipation of finding oil, but when at a depth of 480 feet the borers struck a vein of gas, which burst forth with such violence as to eject all the tools used in boring, together with 200 ft. of pipe which had been previously introduced. The boring had developed a very strong vein of salt water, and the gas continued to spout the whole column of fresh and salt water furnished by the well, to the height of 150 ft., for six months. The idea of manufacturing salt was then conceived, and after the necessary pans, tanks, &c., were put up, the work was commenced. The gas was brought up in pipes from the gasometer, and introduced into the furnace in various jets, which, being ignited, perform the whole office of evaporation without any other fuel. The furnace glows with intense heat, and the flame issues from the top of the chimney. The salt water flows about six gallons per minute, and there is more than sufficient gas to evaporate the whole. It yields about one barrel of salt per hour. The gas furnishes a pressure of 186 lbs. to the square inch, which is 80 or 90 lbs. per inch more than is usually allowed in running a locomotive engine. The well is a most extraordinary one, and the owners, though they failed to find oil, will, it is believed, make a handsome thing out of it.

It is well known that in this part of the continent of North America the most extensive coal fields prevail, in greater quantity perhaps than in all parts of Europe taken together; thus the quantity of carburetted hydrogen gas may be accounted for, but the singularity is, that beds of salt and brine are found in constant companionship with the coal fields. Is it so in other countries? And have any proprietors of our great saltworks enquired into their companionship in England, or tested the vapours and gases found in the neighbourhood? A few experiments in deep boring in these situations might effect valuable results perhaps. SAMUEL PARLBY.

Bewdley, Worcestershire.

THE GEOLOGICAL FORMATION OF THE EARTH.—No. XIII.

SIR,—I fear most of the theoretical geologists are labouring in error as to the formations of conglomorated mountain lime, and take them for debris, or the wreck of the mountains. I believe them to be only crystallisations, on the borders between the mountain lime and the old red sandstone, as they are not of the same character as the mountain lime; near half of them are hollow in the inside, where they have beautiful lime and silica crystals, and contain scarcely a shell, whilst the mountain lime is full of shells; the hollow ones are evidently crystallisations. I believe them all to be produced from lime in solution, where it met the sandstone. Be this as it may, it is evident the earth never underwent but one convulsion by water; had other convulsions taken place, the gold and tin would have been formed under every layer that was deposited by such convulsions, but nothing of the kind is to be found to bear out such a theory. Had coal been once turf-bogs, and submerged by a convulsion of water, it would have had gold, tin, debris, &c., over it, quite sufficient to prove an immersion. There cannot be a doubt in man's mind but the earth's last changes were from a sudden convulsion by water, which swept off the mountains that were in the most placid state. The hornblende rock and particularly basalts, being uppermost, and most likely in a placid state, were swept away for miles, leaving the surface a rough and rugged form, as now found. After this, man appears to have come into existence to inhabit a world that appears to have been millions of years forming. I said before the world appears to have lost its balance, or by some means the water appears to have rushed from one place to another, or it might have been the gathering together of the water, as commanded before man was placed on the earth. This may be said to be contrary to Scripture, and to set Noah's ark aside. I think not; as at the deluge in the days of Noah the water must have gradually risen and gradually subsided. Noah does not say a word about any disfiguration of the earth's surface by the deluge after he had again taken possession. A gradual rise and subsidence of the water would be far more in conformity, as we find no portion of man in the new layers formed by this overwhelming deluge. A gradual rise and subsidence would have left the former living creation all exposed on the earth's surface, where they would have decayed, and nothing would have remained as monuments for the present generation. A different definition may be given to the law of creation to that generally done, as, on the second day, God said let the earth bring forth grasses that bear seed and trees that bear fruit. This does not prove that all was brought forth on that day. If the bottom of the Atlantic were suddenly thrown up as dry land, who can prove that it would not produce grasses, plants, and even living insects? The earth was commanded to do so, and who can prove that the crystallised figures and plants formed in the rock are not Nature's efforts? We know she is continually making efforts, and producing things that are astonishing to man. There is one other argument Plutonians may bring forward in support of their theory,—which is that all elvans and hornblende rocks are deficient in fish and fossils. This, as far as I know, is true; but we all know that no rock so abounds in fish and fossils as the lime formations, and we know that lime, when

burnt or calcined, is most destructive to fish; lime rock has another advantage—it is the best rock known for the preservation of fossils. Nearly every fish that lived when these rocks were forming is preserved; but I believe there was no age in the rise of the world that all things lived in harmony—everything had its enemy, and it is clear the one preyed on the other. I may assert it as a fact that the basalt family contain something in their chemical production to form rock that was injurious to fish, or something that caused them, when dead, to dissolve—most likely both. No real volcanic rock ever produced lodes—it is only a scoria or cinder. It often produces crystals of what the rock contained before it became inflamed—that is, when it was thrown out before its mineral contents were evaporated, and it then made an effort to produce crystals. It may be truly said but few of the laws of the earth are yet known to man, and therefore all should labour to discover them. It is the metallic productions that are now the support of the world, and their laws are the least developed of any known thing. Minerals are only secondary wants, and are all but useless without the metallic substances.

I have to ask those who I have no doubt are labouring hard in the cause of geology and the enlightenment of their young students, to reconsider what they are doing when teaching them what is occurring in the earth, where they have never had a day's practice themselves. What they are teaching has been handed down from father to son for ages. The conversation that not unfrequently takes place in railway carriages between the would-be geologist and his fellow travellers has caused me many a smile. It is not often I interfere with their definitions as to the working laws of the earth; but on some occasions I have entered into a half-hour's sharp contest, and by arguments, diagrams, &c., I have invariably succeeded in vanquishing my adversary, at the same time convincing those present that my views are the best sustained, and in nineteen cases out of twenty making my opponents converts, the majority of them admitting they have to return to school again. I am satisfied I could impart more information to a young student of geology in one tour through England than he would acquire by his books or in any geological school that I have seen in his lifetime. I would send him back, not a spoiled child, but with a mature knowledge of the interior working laws of the earth—the exterior would then become more natural to him. Hitherto I consider our geological teachers have been blowing bubbles, and setting their pupils to run after them, and which they imagine they have caught, but find a void.

A few weeks since I called at a bookseller's in the Strand, with a view of purchasing a book; there I found many minerals, very well arranged, and which the person in the shop appeared to understand. A few questions brought about a conversation, after which he went with the person by whom I was accompanied to the farther end of the shop, with a view, I expect, to ascertain who I was. On my friend handing him the *Mining Journal* of that morning, he returned quite alarmed, and said I was wrong in stating that Scend iron ore came up as a gas from the blue clay below, and crystallised over it for miles, but that it came down. I told him that it was the last layer found, and that it was now at the surface. Would he tell me where it came from? The only reply I got was that he was both a teacher and lecturer on geology, at the same time handing me a copy of the questions put to his pupils at a very moderate charge. I told him they were all very good, but I feared there would be some difficulty in his knowing if proper answers were returned, of which I had some doubt, after what had been stated about the iron ore. I asked him what became of all the lead ore our forefathers allowed to escape from their chimneyless smelting works, the copper and sulphur from smelting and calcining works, also from lodes and volcanoes, and last, though not least, all the coals not consumed but only liberated? Did they soar beyond the clouds, and join the planets or worlds unknown, or did they again return to the earth? He gave one reply, in which I confuted him, when he said my questions would take him a week to answer, and hinted to my friend that I was making his shop a debating-room; in this he was himself the originator. I, therefore, immediately left the shop, but am prepared to meet him, or any of these men at any time in an open and friendly spirit; or I will go to any point or spot where they can point out anything to confute my arguments. I will even go to Italy, to Naples or Sicily, if they will undertake to show me the basalt columns and lodes or faults, and guarantee their being produced by these volcanoes.

London, Jan. 1. NICHOLAS ENNOR.

GEOLOGICAL SKETCH OF THE COPPER DISTRICT OF LOCHWINNOCH.

SIR,—To the north of Lochwinnoch I invite the attention of tourists; for this remarkable spot has to the rambler objects of peculiar attraction, both in its geological features and its mineral productiveness. While viewing the beauties of the scene around, he has an additional pleasure as he contemplates the bountiful gifts of nature beneath, in the deposits of copper now being unfolded. A mineralogist, having climbed to the summit of the range, and taken a casual view of the surrounding country, might feel disheartened, for he beholds hills lava-like in appearance—hills where the igneous rock, not content with cutting through and uplifting, has overflown the stratified rocks, and hurried onward over the sloping surface of the sandstone and clay-slate towards the borders of the charming lake beyond; but at last the force of the eruption is overpowered—the cooling rocks increase their resistance—their onward progress is stayed, and a little of the low ground still remains to beautify the scene. How changed are the present prospects of Lochwinnoch, with its calm and peaceful waters, from the once-convulsed state! What a revolution from disorder to profound peace! As its people, so has the ground on which we stand undergone revolutions,—now pressing onwards its molten streams, which as resistance increased towered up still higher, mountain-like, above its difficulties; again moving on to extreme coldness. And so it is each time that the molten mass is stayed. The igneous column again raises its head, and shows its strength as each hill mounts in succession one above the other, thus illustrating, by their weight and bulk, the power exercised by Nature in overcoming her difficulties; and this I take to be the motive-power which has upheaved the whinstone and amygdaloid rocks above the stratified rocks in this locality. The pressure necessary to move such enormous masses, even in a semi-molten state, is here pictured as you see it—one hill towering above another, the highest pressing the lowest onwards, each cooling and consolidating into perpendicular columns, flattened into layers assuming the appearance of a stratified formation, as if of alluvial origin, and upraised by some eruptive rock. But it is not so: in all the creeks are seen, more especially where the perpendicular layers of rock cease to be regular, some plutonic or volcanic agency, as rents with and across the formation are common, some forming mineral deposits in veins; from which I draw a portion of my proof of the character and description of rock to be met with below this kind of basaltic formation, for in parts of them are to be seen portions of detached blue slate rocks, and others of a more friable and porous nature than those composing the walls or country adjoining the vein; and as depth increases these appearances are particularly observable in the Calder Glen Mine in different parts. Sandstone rock, or debris, in horizontal layers to the east; an apparent slate rock on its edge to the west in the bed of the creek; and in the mine workings in No. 1, completely below the igneous rocks, is the stratum which seems in this locality to be preferred, as the Kaime Mines are so productive in that formation. A great authority in this part asked me what Mr. Henwood meant by driving in a mud rock (that is, a soft clayslate, with the basaltic lava above), in itself sufficient proof of all I have endeavoured to show. No. 2 level is in a masterly east and west lode, cutting through the igneous rocks, and composed of spar, with various portions of other mineralised substances, iron pyrites being widely disseminated throughout the mass, with occasional spots of grey and yellow copper ore. The most remarkable geological feature here seen is blue slate near the entrance, containing copper in the bottom of the driving; and also a large portion of slate rock above, on the right, impregnated with copper, presenting to view evident signs of being shot up from the mineral vein by a power that brought forth with it samples of the rocks at present hidden below, and which, from the appearance of No. 1 level, about 100 yards down the glen, I judge to be within about 12 feet.

To the whinstone rock, so named by miners and geologists who have inspected this district, I should prefer applying the term of basaltic lava, as being the more appropriate, as it would be indicative of the character of the formation, and incite enquiry as to what class of rock it truly belongs. I believe it to be one of the secondary formation, which was not long in position before the earth was rent asunder in its east and west courses; as at the Kaime Mines the courses of such veins, or immense ravines, are seen to have been rent asunder, almost parallel to the compressed, but perpendicular, columnar layers of rock of the igneous formation, which it slightly underlies, inclining or dipping to the south, consequently the portion of the overhanging wall has fallen in at the time of or before the filling in of such veins, thereby causing the apparent irregularity in the copper deposit, as the fallen rock from the overhanging wall has formed horizontal layers of unproductive ground across the lode at the time when it was being filled by water and debris from other formations beneath, together with other mineral compounds, previously deposited by fumes, and then transplanted together with other debris with which such minerals still remain associated, and are to be seen at the West Kaime and Lochwinnoch Consols. The succeeding layers of unproductive ground being portions of the hanging-wall, cause it to be undefined and irregular in appearance, as here to be seen. Again, north and south lodes, or cross-couses, which cut at right angles the compressed layers of rock on its edge, are more regular, and the mineral deposit is not displaced by the falling in of the hanging-wall, as is the case with the east and west courses, which run with the layers of rock. The mineral solution, mixed with the debris of rocks forced up from beneath, shows a change in the description of strata, to be expected in depth, according to appearances.

In West Kaime Mine the freaks of Nature to be accounted for are various. At first cracks and fissures carried the mineral fumes to elevated ground, while open chasms were yet unfilled, and long continued so, for the mixed solution, with mineral ingredients, found vent at a lower level; or, probably, the current was stopped flowing in its natural course by the fallen rocks or cross obstructions in the vein, thus causing such open cavities. These cavities naturally receive boulders and other sedimentary deposits, pointing to the surface as the source from which they have been derived, as the variety of boulder stones present more of the component parts of the hills above than of the underlying rocks beneath, consequently little or no mineral can be expected in such, and levels being driven should be discontinued; but try a little deeper.

Having inspected these interesting features underground, let us return once more to gaze on the surface, and from the hill above admire each sloping declivity as in succession they take a gradual descent, till we find the basaltic lava has ceased in its course on the confines of the lake. Had it proceeded in its onward course the coal deposit could not be where it is, for there are to be seen indications of its resting on it within a fourth of a mile of Lochhead House in an old quarry. The rock has the appearance of a dyke, but, to my surprise on viewing it, the slate rock is horizontal, close to or in conjunction with it, and not decomposed; therefore it appears to be of ancient date, and possibly underlies the coal formation. I have not explored sufficiently to be able to speak positively, but the general appearances, as seen and described by others, lead me to believe that the principal part of Scotland's igneous rocks, which overspread the land, are almost equally ancient with other primary ones; and as we find elsewhere copper in quantities in granite, underneath clayslate, so also in this district are there regular copper lodes or veins, producing ores in great quantities in basaltic lava, overlying a similar formation. Each of these igneous rocks, when cold, derived their mineral deposits from fumes ascending from a depth within the crust of the earth, being condensed and crystallised in ascending to the surface, with other associated ingredients, governing the character of the various crystallisations presented to view.

And now, having admired the scenery of the hills, and penetrated a little into the mysteries they contain, let me glide a little further, and visit the antipodes, where the miner in seeking gold in the alluvial deposits has to sink through considerable thicknesses of a similar rock; but the formation there is of a very recent date, with gravel drift and clay both above and below, their appearance and character being similar. Their source seems also to be of a like origin, for such are there seen to have proceeded from different sources, each overflowing its immediate neighbourhood. The principal discharge of igneous molten matter seems to have been to the north of Ballarat, at the Bald Hills—so named, not for the want of vegetation, but the general absence of trees. The surrounding country being forest land enlivens the view, delighting the eye, relieving the scene, as you pass, exhilirated in spirits, as it were from an endless forest to look upon and admire these objects of peculiar attraction, where the whinstone, or rather basaltic lava, flowed forth from this elevated part, covering the surrounding district with an igneous mass, to be again overlain in parts with other alluvial drifts or deposits of various kinds. What in Ballarat has been proved to exist, was once looked on as impossible; and the man who would have proposed to sink through such a rock would have been considered a fool. But the discovery was made. Some shafts were bottomed half on and cut down the one side; the next in succession had to sink a few feet, were soon through, until shafts are sunk 100 ft. and more before cutting through or overcoming the great difficulty. I suggest it to be possible, therefore, that where in sinking for gold at the antipodes a tertiary rock has been cut through, a rock of a similar class of the secondary period may by exploration prove to be of similar character; the one being associated with gravel, drift, and clay, the other resting on the clay-slate rocks. The few proofs I have yet seen of their origin is given, and those who may take a different view, and pass judgment, will, I trust, inspect the various appearances near Lochwinnoch. An exploration of this mineral district, whilst instructive to the geologist, has its attractions for the speculator and capitalist. Where there is a will there is a way: what is seen to be done by a few with small means demonstrates that there is a wide field open to those who will steadily and perseveringly seek to develope the hidden resources of nature, so bountifully scattered over this favoured land. Disappointments there are, and always will be, but perseverance, with moderate prospects, is often rewarded with success, while to relinquish an undertaking, possibly not very encouraging at first, often leaves the fruit of labour in mineral discoveries to be reaped by successful followers, as Lochwinnoch Consols, now the lion of the district, bids fair to eclipse any speculation in mining; that is, allowing a proportionate productiveness to extend below the present depth, only about 5 fms. What are the directors about? thinking only of making dividends, though a deep adit 6 fathoms below would produce wonders in six months, if up to the main lode in that time! It were better for the directors to sink altogether than to keep swimming over the surface, or finding fault with their agent, Capt. Jones, who would like to see the mine a little deeper. AUGUSTUS BASSETT.

Cathcart-street, Greenock.

THE ORIGINAL OPHIR;

OR, THE GOLD MINES OF SOLOMON'S ERA.

SIR,—GOLD, GOLD, *gold*, being the all-absorbing topic of the present generation, I cannot help thinking, also, our ancient friends, 3000 years ago, must have been touched with the same mania, else King David never could have been able to hand over to his son 10,000 talents of gold, and 100,000 talents of silver, besides *brass* and *iron*, without number (vide 29th chap. 1 Chron., 4th verse), and by 10th chap. 1 Kings, Solomon must have received from Ophir above 700 talents of gold annually. As a talent, according to Dr. Cumberland, Brerewood, and several others, is upwards of 100 lbs., but by Josephus not more than 14 lbs., consequently, at either rate Solomon's pile would amount to a pretty round sum, even in these degenerate times.

Now, where is this said *Ophir*, this rich auriferous area, that was *old* even in the days of Solomon? as by the 8th book of Josephus, 6th chap., it states,—"Moreover, the King built many ships in the Egyptian Bay of the Red Sea, in a certain place called Ezion-geber" (now Berenice); this country formerly belonged to the Jews, and became useful for shipping, from the donations of Hiram, King of Tyre, for he sent a *sufficient* number of men thither for *pilots*, and such as were *skilful in navigation*, to whom Solomon gave this command—that they should go along with his own stewards to the land that was of *old called* OPHIR, but now *Aurea Chersonesus*, which belongs to India, to fetch him gold; and when they had *gathered* 400 talents together they returned to the King again, bringing also apes, ivory, birds, spices, &c., finishing their voyage by going and returning in three years. Now I find by Ptolemy's charts that the Aurea Chersonesus was supposed to be on the Malayan Peninsula, *that* being *then* thought the utmost limit of navigation—but it appears absurd to suppose *such*, when the mariner's compass was known long before Solomon's time, and when navigation and astronomy were also well understood. The size of vessels also appears to have been large, for Josephus mentions that ships were broken at Ezion-geber, for their *unwieldy greatness*. But whether those destroyed were the vessels built by the Kings of Judah and Israel, mentioned in 20 chap. 2 Chron., is of very little moment. Therefore, I anticipate, in Australia will eventually be found the locale of those ancient mines, and probably not far from the Gulf of Carpentaria, as it agrees with ancient manuscript, respecting the far *southern* latitude, and tropical climes in the *South Sea*, which the fleet never went out of; also, the long *easterly* course steered, so that by a three years' voyage vessels would have the benefit of trade-winds both ways. Besides, the cargo of ivory, apes, &c., could no where be better procured than *en route*—viz., Ceylon, Borneo, Sumatra, Malacca, &c., procuring tin and copper from Banca, &c., then by crossing the Straits reach the southern ultima, or the farthermost bounds of the earth, as was then supposed. Besides, what gave rise to certain spice islands in the same route being originally denominated SOLOMON'S Isles,—did not King Solomon receive his rich spices, &c., from thence while pursuing his *easterly* course for gold? then what deviation would his ships make to go through Solomon's Archipelago to reach the Gulf of Carpentaria, where not only gold, but the finest *almug* trees in the world grow, as will be shown next week. If any imagine that navigation at that early period was not perfectly enow, they have only to consider that both David and Solomon were endowed with special wisdom; surely, then, they would possess the requisite knowledge to point out the richest deposits on earth for a godly purpose. Solomon himself says God gave him wisdom and understanding (*exceeding* much); and in the 7th chapter of his Book of Wisdom, he declares that he knew the circuit of years, and the position of the stars, &c.

In confirmation of the above, Mr. Wood states that, at Balbec, was a finely-sculptured zodiac of the stars, by Solomon's superior knowledge, &c. Josephus mentions, in his first book, that Seth was proficient in astronomy, astrology, and geometry—even before the flood. See, also, the Arundelian Marbles, the works of Minos, Homer, Thales, Confucius, Cyrus, Pliny, and many others, all confirm the truth that astronomy and navigation were well known to the ancients. Even in Sesostris' time these sciences were far advanced. Secondly, the natives of Australia have every indication of being of Arabic and Egyptic descents, both in their physiology, circumcision, wandering unsettled habits, and other peculiarities; such would occur from some being left behind at that disastrous period. Their weapons also are in every similar respect like unto those used by the early Egyptians, particularly the bomerang, waddy, spear, &c. Nevertheless, climate, time, and other causes would evidently obliterate many distinct traces of the original tribe, left so irretrievably on such a wilderness, at so remote a period. Thirdly, as a further corroborative proof of these islands being inhabited by tribes from Egypt, &c., examine well the species and habits of most of the beasts, birds, and reptiles of New Holland, and you will find they nearly all appear identical with those formerly worshipped in the East as deities; particularly the serpents, lizards, guanos, vultures, hawks, &c. Then seriously consider if it is not within the bounds of probability that the native dog and cat of Australia may not be allied to the jackall and ichneumon, the kangaroo to the jerboa; the emu and ostrich have every indication of being of the same family; while pelicans swans, turkeys, quails, &c., are abundant in both hemispheres; even the marmot tribes have great similarity.

Neither can it be disputed that the art of mining, mineralogy, chemistry, and most other kindred sciences, were well understood by those patriarchs, as 1308, B.C., both Memphis and Thebes could boast of superb libraries; notation at that period also was in vogue, of a peculiar kind, and circumcision had been practised long before. One of the greatest proofs that the aborigines of Australia must in eras forgotten have mixed with civilisation is that there were native chiefs who to this day retain vestiges of some of the same universal signs once issued by King Hiram, when he was the C. G. Master of Freemasonry—any keen, learned P.M. mason may perceive the signs exchanged with certain, natives could only have been imparted to them as a kind of heirloom, and not from any present constituted masonic formula among themselves, as those untutored aborigines could only receive their traditionary secrets from ancestry, in the same way the Brahmins imbue each other with the past secrets of their *sa-creed* rites, from the mysteries of their religion being founded in the divine origin of primitive masonry.

Lastly, I consider it easily accounted for why the original *Ophir* should be so often controverted, as all recorded traces of the voyages and voyagers were lost soon afterwards (vide Ezekiel 25th and 26th chapters). The ships and city of Tyre being annihilated, and Solomon's generation cut off, it requires but little thought to account for its oblivion. Nevertheless, Solomon distinctly states that nothing is new under the sun; and as no proverb or prediction has ever hinted that the said Ophir should not be again known, where is the incongruity or improbability of Australia not being the original country of Ophir (or O'far)? On the contrary, were I to publish all the deductions and evidences I have obtained from various sources in proof of the above allegations, and in confirmation of all my former assertions, that the richest arena on the globe is in Australia, your humble servant would be deemed a G. F. GOBLE.

P.S.—It is more than 30 years ago since I began to notice the different peculiarities of the various tribes of aborigines in New Holland. I could not but observe the stunted wretches on the Swan, from their stalwart neighbours on the River Murray, or the Port Lechenault tribes to those at King George's Sound; again, the difference of those miserables at Spencer's Gulf to the Adelaide, or Portland Bay wretches to the Melbournites, the Cape Howe wanderers with the Sydney remnants, and the varied marauders round the Carpentarian Gulf. It requires but little physiological reasoning to distinguish at least two distinct races of beings, one Egyptian, the other Malayan. But my purpose is not with blacks, but yellows, that I wish to show are indigenous to Australia, in greater abundance than any other portion of this mighty globe; not only gold, but every other metal and mineral are to be found in that hemisphere.

How far my published predictions [six years ago] have been verified in respect to the *rich-nest* of gold discovered in the southern hemisphere I leave sensible people to consider—also to seriously think if I had so many years back good data for considering Australia the richest arena on earth, might I not since have obtained other proofs for now reiterating there is native gold enough around the Gulf of Carpentaria to far outweigh the national debt of Great Britain, and such would be proved when the land there is again people by living whites, as wise as men were in the days of Solomon.

Jan. 2, 1862. G. F. GOBLE.

THE COST-BOOK AND JOINT-STOCK SYSTEMS.

SIR,—No better proof of the truth of Mr. Henwood's illustration of the folly practised by ignorant committees can be afforded than by two mines in my locality; in one of them the chief captain enjoys a salary of 12*l.* 12*s.* per month; second captain, 7*l.* 7*s.* per month; the secretary and office expenses, 8*l.* per month; local purser, 2*l.* per month; and visiting directors' expenses 3*l.* per month. The mine employs 10 miners only. In the other case the captain obtains 12*l.* 12*s.*; the secretary, 4*l.* 4*s.*; and the visiting committee, 3*l.* per month. Number of working miners, 18. These are incontrovertible facts, and demonstrate the vast superiority of the Cost-book over the Joint-stock System, where absolute power is delegated, as in these instances, to committees not a single individual amongst whom know anything whatever of practical mining, or of mine management. No wonder such reckless extravagancies are indulged in; had the affairs of the mines been subjected bi-monthly, as under the Cost-book System, and regulated by the body of shareholders assembled, instead of the former method, very different results would follow their deliberations and votes, as well as a very different state of the company's funds, whether stocked or subscribed as the money is required. I hold, and have always found, that where the cash has to be produced to meet payments as debts accrue it is far more economical than where committees have it in their power to vote away, *ad libitum*, from a well-filled exchequer. Add to this, the delegated power is frequently conferred on parties who hold trifling interests, because they can make an elaborate speech, or possess unbounded impudence to thrust themselves into high places, and to have the supposed honour of being "Jack in office," facts which such parties usually prove. SCRUTATOR.

MINING RETROSPECT—EAST CARN BREA.

SIR,—Referring to the letter of your Redruth correspondent, in last week's Journal, I venture to call attention to a singular coincidence—that while the letter was being printed, containing an auricular hint at side lodes being speedily cut, a lode was being cut into in the 26 cross-cut south, never before seen in the mine, and only 2 fms. from the rich lode now being worked on, and found to be 2 feet wide, worth 1½ ton per fm. of rich ore. This discovery is so far important that the same can be seen from several points of intersection, as the 26 end is 60 fathoms in advance of the cross-cut. In a cross-cut now being driven north, in the 50, a lode of extraordinary promise, where seen in the adit, may be expected to be intersected within a few weeks, and should this too turn out productive, it is needless to say it would be of vast importance to the mine, and add greatly to its value. It may be that, from the fact of being a large shareholder, I am prejudiced in favour of this property, but I confess I know of no such promising mine in Cornwall as East Carn Brea, and I challenge a comparison with East Caradon at the same position of development, or (say) 12 months ago, when East Caradon shares were selling at 11*l.*, now 29½*l.* per share. East Carn Brea shares are now 10½*l.*, and I am sanguine enough to look for quite as brilliant a future in East Carn Brea as East Caradon now so proudly occupies. As a shareholder, I thank you for having so promi-nently noticed the property; your friends who have recently invested will have no less cause to thank you and your Redruth correspondent, and every true friend of mining will have cause to thank you for prominently bringing before the investing public a property that cannot fail to arouse the latent springs of capital into activity in a field that wants all the friends it can muster in its cause.—*Threadneedle-street, Jan.* 1. T.

EAST CARADON MINE.

SIR,—Seeing a report in last week's Journal of this mine, signed WM. RICH, intending evidently to unfairly depreciate the value of the new lode recently discovered here, I beg to inform you that three other agents saw the lode at the same time, and were united in their opinion as to its being worth one-half more than he states—30*l.* per fm. It may be that being unaccustomed to productive lodes in his own mine, he may not be qualified to give a correct opinion.—*Jan.* 2. JAMES SECCOMBE.

THE BON ACCORD MINE (AUSTRALIA).

SIR,—How is it that, with the experience of the past, the miserable failure about the engine, and the cost the company was put to in acquiring new power, in the present position of the workings so few cross-cuts are put out in the respective levels of this mine? With the exception of the one west to reach the lode in the 50 we have no *active proof* going on of a desire to develope this finely-situated property. My belief is that cross-cuts and cross-cutting the lodes frequently is saving work, and the making of most mines. Here, they are driving north on the winze lode in the 40, sinking a winze in the 18, and another from the 40 to the 50, and yet I doubt very much whether the exact run even of the lodes proved is known by agents or by the local committee. If it is to be understood that the lode *is proved* at all these upper levels, then I cannot at all make out why Capt. Jeffry should desire to have a *practical miner's* inspection. Is he not a practical and experienced agent; yet, from his last published report, he begins even to doubt his judgment as to whether the shaft would go below the 50. He says, "that notwithstanding the country is changed so much for the better in sinking from the 40 to the 50, without improvement in the lode in the deeper level, I feel I could scarcely advise to sink deeper." Now, if your readers will refer to the reports which came from the same channel some months ago, eulogising this very lode in the 40, they will with me exclaim—"*Is it possible that an intelligent miner, like Capt. Jeffery can*, upon his *own* judgment, and without *extraneous influence*, hesitate just because the development of the lode, for that short space of its intersection, does not correspond with the improved character of the matrix surrounding it?" He knows that he is working a mine next to, and immediately adjoining, one (Burra Burra) which from *deeper* levels returned last year 12,237 tons of copper ore of very high standard; the shareholders are realising handsome dividends, while their shares, upon which they have paid 5*l.* only, are saleable at 116*l.* I am indebted to your estimable Journal for this data, and, singularly enough, both this and the last report from Bon Accord appeared in the same Journal (Dec. 21).

I am told the Capel-court speculative theory is, that the position of Bon Accord relatively with Burra Burra is such that the rich lodes of the latter would only pass through one corner of the Bon Accord property: such may suit the "bears," but I believe it to be diametrically opposed to the fact. The Burra Burra and the Bon Accord Mines stand in a direct run 5° east of south and west of north, the lodes being defined by the reports to be north and south. I would venture to suggest that a more active system of cross-cuts at *present* depth, and 20 fms. *additional depth*, are the things to make this mine valuable; and I hope the directors will not allow feebleness of purpose, whether emanating from the agent himself, or prompted by the local committee, to take them out of their proper course of duty.—*Jan.* 3. CIVIS.

MR. WATSON'S REVIEW, AND THE EXPENSES OF MINING.

SIR,—On perusing Mr. Watson's excellent Review in last week's Journal, I was very much struck with the large percentage of profit paid by the East Wheal Basset Mine out of the returns of ores; and it led me to make a few comparisons, which I send to you, as they may lead shareholders and managers to consider that economy in working is one of the great elements of mining; and the returns thus given by Mr. Watson become valuable to us as guides. I will first take the—

EAST BASSET—returns, 17,539*l.* 1*s.* 10*d.*; profit, 13,312*l.*; cost for a year, 4227*l.* 1*s.* 10*d.*, or less than 400*l.* each month.

BEDFORD UNITED, out of 13,082*l.* produce, paid 2400*l.* profit; cost, more than 800*l.* each month.

CARN BREA—returns, 46,681*l.*; profit, 2000*l.*; expenses nearly 4000*l.* each month.

DEVON CONSOLS—returns, 104,073*l.* 9*s.*; profit, 43,008*l.*; expenses, 5000*l.* each month.

WHEAL BASSET, under the same management as East—produce, 24,866*l.*; profit, 6656*l.*; expenses, 17,210*l.* in 12 months.

EAST CARADON—returns, 20,992*l.*; profit, 8448*l.*; expenses, 12,444*l.* 5*s.* STATIST.

Meetings of Mining Companies.

DEVON NEW COPPER MINING COMPANY.

A general meeting of shareholders was held at the company's offices, Barge-yard Bucklersbury, on Tuesday, Mr. C. OTTER in the chair.

Mr. PAGE (the secretary) having read the notice convening the meeting, and the minutes of the previous one, the report of Capt. Hawke, which was of a satisfactory character, and the balance-sheet, from which the subjoined is condensed, were submitted:—

Capital subscribed		£23,272 5 0	
Liabilities for balance of steam-engine and sundry creditors' accounts	946 6 3	= £24,212 11 3	
Mine costs, merchants' bills, and sundries		23,705 14 0	
Leaving credit balance		£ 506 17 3	

DIRECTORS' REPORT.

The directors have always considered that the main object of the mine was to get the engine-shaft down in depth; they have, therefore, energetically carried on the workings at this point, and have now reached the depth of 90 fms. from the surface; but, from the state of the finances, they regret to state that they have been compelled to suspend operations at this point. At the depth of 88 fms. the new south lode made its appearance in the back of the engine-shaft, and a cross-cut has been driven into it to the distance of 12 ft. 6 in.; but this also, for the reason given above, has been suspended. The lode is highly mineralised in its character, but the ore is not yet of a saving description. Capt. Hawke has now been enabled to ascertain that the junction of the two great lodes will not take place until 18 fms. below the present bottom. This has been occasioned by the great north lode becoming more vertical in its dip—a feature which is considered of great importance. At the 78, as was stated in the last report, a leader of quartz, mundic, and yellow copper ore was cut through, and between this leader and the footwall of the lode two other leaders were met with. This first leader was opened upon east and west, and the directors are happy to state that a discovery has been made of a course of yellow copper ore, the veiny part of which has been proved by assay to contain 17¾ per cent. of copper. This leader is worth at present about 2½ tons of ore per fathom, at about 8*l.* per ton; it is about 4 fms. long, by 4½ ft. wide. A piece of this leader has been brought to surface, weighing 346 lbs. This leader has been intersected by a cross-cut at the 88, and, though poor at the point of intersection, the captain speaks very highly of its character, and men are employed day and night in driving east and west upon it, so as to reach the more productive part of it; but operations are here much delayed in consequence of the immense body of water which is issuing from the point of intersection. The captain expresses great confidence that there is a large body of valuable ore between the 78 and the 88, which might be realised in a very short time. Capt. Hawke has estimated the expense of reaching the junction of the lodes and carrying on the operations of the mine as at present at the sum of 3000*l.*, and, as valuable ore is now being raised, it will be necessary to crush and dress it, at a cost of about 850*l.* In the report received from the mine this morning Capt. Hawke states—"I am now satisfied, from the prospects in the bottom of the 78, that we are on the top of an immense deposit of copper ore;" and again—"I don't regard the mine to the least extent as a speculation, but ultimate success as certain, and at the present levels an abundance of copper ore is to be laid open at the 78 and 88." The directors have, therefore, determined to recommend to the shareholders at the general meeting to rescind the resolution limiting the issue of shares to 12,000, and to permit the directors to issue any number of shares not exceeding 2000 out of the 8000 reserved shares, on the best terms than can be obtained.

The CHAIRMAN stated that they had been called together in pursuance of the promise of the directors to consult the shareholders as to the course to be adopted in the event of further capital being required. They had prepared a statement of the work done at the mine, and of the results obtained since the last meeting, and he thought it would be satisfactory to the shareholders to find that the state of the mine showed that what they had been looking for since Feb., 1860, had now been found. Their unds, however, were nearly exhausted, for at the present time they had but a balance of 76*l.* 12*s.* 2*d.* to meet the cost now due, amounting to about 300*l.*, so that they would see that they were at the same time in the arms of victory and in the jaws of death. It would be for the shareholders to say what course should be adopted to place them in a better position. He thought it was now beyond doubt that the run of ore in the 78 goes down to the 88, and even much lower. Capt. Hawke estimated that 3000*l.* more would place the mine in a satisfactory position; to provide, however, for all contingencies, the directors proposed to ask the shareholders to rescind the resolution cancelling 8000 of the 20,000 shares into which the company was originally divided, and to give the directors authority to issue 2000 of the reserved shares that were placed at disposal; and it was the directors' intention to have a circular printed for distribution amongst the shareholders, containing such arguments as they thought would induce them to take shares. When the ore was found below the 78 fm. level it was intended to work it and bring it to market, but the water was found too much for them, and they were obliged to suspend that point. They had now intersected the ore in the 88 fathom level, and the water was lowering in the 78 fathom level, and they now agreed with Capt. Hawke that the mine is no longer a speculation, but a certainty. They hoped that Capt. Hawke's estimate of 3000*l.* would carry them down to that which was the object of all their operations—the junction of the lodes. Himself and Mr. Page had carefully examined every level and end in the mine, and were perfectly satisfied with the appearances. In one part, indeed, the water held so much copper in solution that a pick-axe which was allowed to remain in it was rapidly decomposed, and converted into nearly pure copper, specimens of which were on the table. Captain Hawke intended to have sent the pick-axe itself for the inspection of the shareholders, but found that it would be useless, as in packing the scales on the surface were knocked off; he, therefore, sent some scales only. They would see that one sample, which consisted of the outer scales, was almost pure copper; whilst in the other, which was from further in, there was a mixture of iron, all of which had not been converted.

Mr. SHIRLEY WOOLMER was gratified to find that their object had been so nearly obtained, and they should remember that no great adventure had proved successful until it had been tested and tried. Under these circumstances, it is with no ordinary pleasure that he proposed that the report be received and adopted. They must not be surprised at capital being required, as no commercial undertaking can be carried on without capital; he believed they were now only just beginning to open out the mine, and he was glad to see the spar with the copper, which was similar to the ore from the Devon Great Consols.

The CHAIRMAN said Mr. Matthews was astonished at the similarity of the ore from the Devon New Copper Mine to that of the Devon Great Consols.

Mr. WOOLMER thought there could be no doubt that they must have proper machinery to open the mine. It was the magnificent machinery at Devon Great Consols which enabled the ore to be worked. He would suggest that the whole 8000 shares be issued

and a small deposit paid, which would ensure them ample capital should it be required. He had no doubt of the ultimate success of the undertaking, and that it would prove a blessing to the neighbourhood; even it might be when they had all passed away.

Mr. SHOWELL seconded the resolution, which was carried unanimously.

The CHAIRMAN then proposed the resolution for authorising the issue of 2000 of the reserved shares. It was intended, he said, to put up a water-wheel, but the water would have been lost for dressing and other necessary purposes, as it would have had to be erected near their boundary; the idea was, therefore, abandoned, and an engine decided upon. This second engine was to raise and crush the ore. They now raised it by horse-whim, and, as the depth was 55 fathoms, the rope was heavy, and they had to employ three horses.

A SHAREHOLDER: Then 4000*l.* will be no use?

The CHAIRMAN said that they hoped the leader in the 78 would provide funds to assist them. It appeared likely that the lode would increase in size and value as it went down; so if when they got down their expectations were realised, they would have no difficulty in getting further funds if required. He might state also that the ground in the 55 was mostly so soft that it could be removed by pick and shovel.

After some further discussion, in the course of which Mr. SHOWELL remarked that some inducements should be held out to the shareholders, as it would be scarcely likely that 2*l.* would be paid for shares to the company whilst they could be bought in the market for 1*l.*, the resolution was carried, the terms upon which the shares were to be disposed of being left to the decision of the directors, after consulting with Mr. Frome, the company's broker.

The usual complimentary votes terminated the proceedings.

DALE MINING COMPANY.

A quarterly general meeting of proprietors was held at the company's offices, Adam's-court, Old Broad-street, on Tuesday,—Mr. J. ORTON in the chair.

Mr. DUNSFORD (the secretary) read the notice convening the meeting.

A statement of accounts for the three months ending September showed—

Mine cost, July to Sept.	£328	5	2		
Merchants' bills	206	9	2		
Royalty on ore sold	70	18	2		
Interest on loan	18	15	0		
Rent	6	5	0	= £1130	12 6
Lead ore sold	£776	14	6		
Income tax on dues	2	13	2		
Calls received	322	7	6	= £1101	15 2
Leaving débit balance				£	28 17 4

The report of the agent was read, as follows:—

Dec. 30.—Since the last general meeting we have sold 77 tons 13 cwts. of lead ore, which was raised in the months of Oct. and Nov. During the present month (Dec.) we have been chiefly occupied in altering and fixing additional pitwork, also a new main connecting-rod and a new balance-bob, as well as repairing the loadings, cleaning the boiler-flues, &c. The time occupied in this work, as will be seen, has greatly diminished the quarterly returns, but we shall soon reap the benefit of it, as the additional pitwork referred to will enable us to lift more than 70 gallons of water per minute over and above what we have been hitherto lifting. The Pipe vein is looking well, and the three carriages of ore, mentioned in my former report, still continue, and had they kept the course they were then taking, they would have come together before this; but when they entered the saddle ground they are now in it altered their course, but it was under similar circumstances, in connection with saddle ground, that Ecton produced its great riches, and we may fully expect the same results at Dale. The new shaft is now down 41 fms., and in about 9 or 10 fms. further I expect to cut another strong vein, containing good ore. Lately the ground has been very much mixed with chert (silex), consequently it is much harder for sinking, but these are temporary changes we may expect; and, although they somewhat retard our progress, yet it is a good indication for minerals. It is satisfactory to remark that we are now below the adit level, and so far there is no water in the shaft, except that which drains into it from the surface, which will, in a short time, to a great extent be got rid of by means of the shallow level we are now driving towards the shaft. I believe there is every probability that the works on the Pipe vein are draining the shaft, which may be considered very important. I am not in any way connected with Crease's excavating machinery, beyond what I read of. I should, however, be glad if it were found to answer our purpose better than the present mode. The rock that the new shaft will have to go through is much varied in hardness and underlie; sometimes the chert is almost as hard as steel, while other portions of the rock are much softer, and, when in connection with saddle ground, it dips almost in every direction at one and the same time. The size of the shaft must be no less than 10 ft. diameter. I fancy the machinery would operate better on rocks of uniform bearing and hardness than those so varied in character. It will, however, be for those who understand the merits of the machinery to say if it will excavate our new shaft with success.—R. NIXESS.

The CHAIRMAN having moved the adoption of the report and accounts, said it would be seen that the new shaft was being prosecuted with all due vigour. The report, however, detailed so fully the position and prospects of each point of operations, that it was unnecessary further to refer to the subject than to state that the results which had been anticipated from the sinking of the new shaft by no means diminished as the work progressed. He might inform proprietors that the board had made another call upon the new shares.

Mr. STUBBS enquired the course the board adopted with regard to the ore sales?

The SECRETARY replied that the ore was sold in the usual way, by tender. The smelters were invited to tender for it, and the highest bidder was the purchaser—it was the plan generally pursued by mines unable to send their returns to the ticketing. He reminded the hon. proprietor that during the past three or four months the value of lead had decreased.

The CHAIRMAN said he regretted to inform the proprietors that their Chairman was prevented by indisposition from occupying the chair upon the present occasion.

Mr. STUBBS enquired what amount had been called upon the new shares?—The CHAIRMAN replied that, including the call just made, 10s. per share had been called up. The water-course, to which reference had been made upon previous occasions, and for which they had paid 25*l.* per annum, had been given up, it being found that its further use would not be required.

The report and accounts were then received and adopted.

The CHAIRMAN said that, according to the company's rules, one of the directors retired from office at each quarterly meeting. Upon the present occasion Mr. Provis retired from the directorate, but, being eligible for re-election, offered himself accordingly.

The question being put, Mr. Provis was unanimously re-elected.

A discussion then ensued with regard to Crease's excavating machinery, but no resolution was taken upon the subject.

The SECRETARY, in answer to questions, stated that the size of the present shaft was 10 ft. by 6 ft., and being in the limestone it only required dividing. As regarded the manufacture of lime, that was at present under the consideration of the board.—The usual votes having been passed, the proceedings terminated.

PENDEEN CONSOLIDATED MINING COMPANY.

An ordinary general meeting of proprietors was held at the London Tavern, on Tuesday,

Mr. W. BAWDEN in the chair.

Mr. D. COHEN (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

A statement of accounts for the two months ending Nov. showed a loss of 374*l.* 4s. 7d.; and a general balance-sheet showed a balance of assets over liabilities of 1104*l.* 14s. 11d.

The report of the agents' was then read, as follows:—

Dec. 30.—Since the last general meeting the engine-shaft has been sunk 6 fms. 3 ft.; the lode is 2 ft. wide, composed of beautiful quartz, prian, mundic, and tin, worth for tin 10*l.* per fm. for the length of shaft. We believe the south part of the mine, in the granite, will be productive for tin, and should the lode now in the shaft continue (which we have every reason to believe will improve), we shall have a good tin mine south of shaft in the granite. The 130 north has been driven 5 fms. 2 ft.; the lode has been disordered by a slide, but the ground at present in the end is more congenial for mineral, and we expect an improvement shortly. The 118 north has been driven 7 fms. 5 ft.; lode 1½ ft. wide, worth 10*l.* per fm.; we expect the lode at this level will improve as we get more under the run of ore gone down in bottom of the 106. The stopes in back of this level, south of No. 1 winze, are wrought up to the 106; shortly we shall have stopes north of No. 2 winze to replace them. The 118 south has been driven 5 fms. 3 ft.; the ground in this level has much improved for driving, and is more kindly for mineral than it has been. The winze in bottom of the 106, south of shaft, has been sunk 2 fms. 4 ft.; lode 2½ ft. wide, yielding saving work for tin and copper. In the 106 north we have not taken down the lode; when last taken down it was worth 8*l.* per fm. In the 94 north we have cut into the lode; it is 1½ ft. wide, and have not yet reached the western wall; we have broken good stones of ore, but do not know its size or value, though there are good indications of its being a good lode; we thought to prove its value to inform you at the meeting, but time would not permit it, as there is not sufficient ground opened to break so large and strong a lode. By reason of the north part of the mine being idle since April, 1860, the productive part of the ground opened has been wrought away, and it will take us time to open out the north part of the mine in a miner-like manner, in order to take away the ore at the cheapest rate, which we shall do with all possible speed, and at the next general meeting we think the mine will be in a better position, and shortly we hope to repay you for all your outlay.—WM. EDDY, JAS. WARREN.

The CHAIRMAN said that, in addition to the report just read, there had been received a letter from Mr. White, their purser, accompanying the lease, which latter, for something like 18 months, they had so urgently desired. He was happy to say, however, that the lease, duly executed, was now upon the table, so that, in the words of their purser—which he (the Chairman) entirely endorsed—they could steadily progress until they became in a dividend position. Their operations under the sea were resumed, and, therefore, they had full command of the whole of their mine. They might confidently look forward to an entirely altered aspect in the whole of their affairs, as they had four levels being driven—the 94, the 106, the 118, and the 130, and in the course of another month they would have the 142. From this it would be seen that, although they had been precluded from prosecuting their under-sea operations, the mine had been steadily developed, in order that, upon the due execution of the lease, the whole of the property might be the more rapidly brought into a profitable condition. Although the settlement of the lease had been a very tardy operation, it had at length been completed, and he hoped by the next meeting the results achieved would prove equal to their anticipations.

Mr. BIRDSEY should certainly recommend all parties about to take or renew a mining lease to make a decided stipulation, that unless the same be executed within a specified time it would not be accepted. The protracted difficulties the committee had had to contend against were something beyond conception or belief, and for his part he never would again (nor should he recommend his friends) to have anything to do with any mining enterprise before the lease had been fully executed. He defied any body of gentlemen to have exercised more zeal or perseverance than the committee had done in trying to bring about a more speedy settlement with regard to the new lease. Forgetting the past, they might, he believed, look forward to a successful future. He should be very sorry to find any of the shareholders, who had exercised such untiring patience, parting with their interest, and thus allow others to come in and reap the reward which he thought was now so near at hand.

Mr. S. MOCATTA, referring to the agents' report, enquired if the committee had any further information to communicate with regard to the 94 end?—The CHAIRMAN replied that the last information the committee had received stated that the lode had been cut into 1¼ foot, but had not yet reached its limits, and, therefore, they could not at present say what was its size or its value.

Mr. M'CALLAN said the Pendeen shares stood at a good price in the market. Comparatively speaking, he thought they equalled those of its neighbours, the Botallack and the Levant.

Mr. BIRDSEY said the point raised by Mr. M'Callan was one that required some consideration before an opinion could be fairly pronounced, for in making the comparison they would have to recollect that in the one case the property had been in course of development for fifty years, during which period considerable returns had been made, and profits divided; while, on the other hand, they had a property which had only been in working for about eight years, and, therefore, by far the largest proportion of the ground was in a virgin condition, the returns from which had yet to be made, and the profits to be realised.

Mr. S. MOCATTA enquired what had been the expenses attending the new lease?—The SECRETARY replied that the total expense amounted to 145*l.*

Mr. S. MOCATTA enquired for what period the lease had been granted, and what royalty would have to be paid?—The SECRETARY replied that the lease was granted for 21 years, dating from October, 1860, upon a royalty of 1-20th for copper and 1-23d for tin. In answer to further questions, the Secretary stated that the sales of ore had realised 737*l.* The samplings were rather less than usual, but proprietors must recollect that the ore was dipping north, and, of course, so long as they were kept from driving the levels under the sea their samplings would have continued to diminish.

The report and accounts were then received and adopted.

Messrs. William Bawden, Edward Clifford, William Birdsey, William Coombe, and Samuel Mocatta were elected the committee for the ensuing two months.

A vote of thanks having been passed to the committee of management for their past services, the usual compliment to the Chairman terminated the proceedings.

GREAT DARREN MINING COMPANY.

On Tuesday a numerous party of gentlemen interested in the development of the mineral resources of Cardiganshire assembled at Mr. T. Spargo's office, Gresham House, to determine upon steps by which to ensure the more vigourous and complete prosecution of the works at the Great Darren Mine, which is one of the oldest grants in the county, and few have produced, when properly developed, larger returns of ore. Among those present may be mentioned Messrs. Joshua Nunn, J. Cotterell, C. Cockcraft, J. Fairburne, F. Turner (of the firm of Preston and Turner), H. Thomson, E. Davis, A. Milstead, &c.

Mr. JOSHUA NUNN, who was called to the chair, explained at some length the object of the present meeting, which was to determine upon the best course for the energetic development of the Great Darren Mine, which had for many years produced such large quantities of silver-lead ores. This mineral property is situated about six miles from the ancient town of Aberystwith, and in the centre of the richest silver-lead district of Cardiganshire. From the information he had collected upon the subject, he found that this old and well-known mineral property was formerly worked by Sir Hugh Myddelton, who for a long time succeeded in obtaining from it considerable profits. It would probably be asked by some, and not without reason, why such a property, possessing such an ascertained source of wealth, should be transferred from one company to another; the answer to which was, to his mind, perfectly satisfactory—that the party from whom the property had been purchased, although developing the upper works profitably, and believing the whole of the property would well repay for a complete development, had agreed to dispose of his interest, as it would be necessary to provide more efficient and powerful machinery if the mine were to be vigorously developed. But those who had now purchased the property had done so with the determination that the mine should be forthwith provided with all the appliances modern science could supply, so as to energetically extend the underground operations, more particularly towards the Great Cwmsymlog lode, which had not, from some strange oversight, yet been opened upon in this grant. All he could say was, that from all he had heard and read of the immediate district, and of the property itself, there was every prospect of the Darren Mines proving the most lucrative of any in the county of Cardiganshire. Mr. Spargo was present, who had just returned from the mine, and would submit to them the result of his enquiry.—

Mr. THOMAS SPARGO said it was with much pleasure that he laid before the gentlemen present the result of his enquiry and investigation into the antecedents and prospective results of that which he might, perhaps, not inaptly term the patriarchal mine of Cardiganshire—he referred to the Great Darren; having but a few days since, accompanied by Capt. Matthew Francis, met upon the property the lord's agent (Mr. Graham Williams), who took considerable trouble in making them fully acquainted with the whole of the details, they found that the old lode had been opened and taken away from the surface to a depth of about 100 yards, from which there had been returned almost extraordinary fabulous quantities of rich silver-lead ore. He reminded the meeting that he made that statement not upon any dubitable authority, which evidence could not substantiate, but upon the irrefragable testimony adduced by the manuscripts in the possession of Mr. Pryse Loveden. Through the kindness of that gentleman's agent, he (Mr. Spargo) had been allowed to make a copy of some of those manuscripts, one of which he would read. It was dated Feb. 12, 1742, and ran as follows:—

"WORTHY SIR,—They have raised at Darren Vawr Hill, near Aberystwith, for some years past 200 tons of lead ore per quarter. The ore contains from 50 to 60 ozs. of silver to the ton, and is worth clean on the bank or quay 20*l.* per ton, but the charge and expenses are to be deducted out of it; so that there is a clear profit of 12,000*l.* per year, and all within the compass of 200 yards.—I remain, &c., LEWIS MORRIS."

He (Mr. Spargo) thought that no one could produce better evidence of the intrinsic value of a property than that afforded by the letter he had just read, which was penned 120 years since by one of the greatest antiquarians of that age. He could only say, he had never been connected with any undertaking with regard to the results of which he felt so confident; for he not only had conclusive, because incontrovertible, data from several eminent practical authorities, as to the unmistakeable merits of the property, but the still further satisfactory evidence of the fact that, even at the present time, more than two-thirds of the men engaged in its development were breaking ore at a considerable profit. As regarded the machinery, to which allusion had been made by the Chairman, he might, perhaps, state that although three weeks since much of that machinery was disordered, and altogether incapable of prosecuting the works, the pumping machinery had been repaired, and, from a letter received that day, the water was being forked in the Darren Fach engine-shaft, and the character of that part of the mine was by no means dubious, having always been worked at a considerable profit. The crushing machinery had also been put in order, and was now producing ore for the market—indeed, everything had been done that could possibly be during the short time since he had taken possession of the property; and if he were to believe the best authorities upon the subject, and the ancient records he had perused, it was impossible to say what amount of valuable ore the Great Darren Mine was now capable of producing under good management. He was, moreover, led to believe when the well-known Cwmsymlog lode was laid open for regular working, which would not take more than a year to accomplish, that a new mine of great value would be added to the present source of wealth. All he could say was, that so far as he was concerned, and he felt certain that he might speak with the same confidence with regard to those with whom he was associated, the utmost vigilance and economy should be exercised in carrying out the development of the property, for not a farthing of the funds entrusted to him should, as far as he was able to control them, be misspent or misappropriated; and he could assure the meeting that the whole of the details should be carried on unremittingly, and agreeably with the instructions of their engineers. He had known, to his cost, that many good mines had sorely suffered from a want of method and perseverance in the plans of the engineers; but where the business was understood, and the line of duty laid out at the commencement was undeviatingly followed, the results, he found, were generally satisfactory, and in accordance with the means taken to obtain them. The statistics of Cardiganshire showed fewer blanks in great mining undertakings than any other county with which he was acquainted; and the capital expended in them bore very little comparison with the amount received by the respective proprietaries in the shape of dividends, arising from the very obvious reason that the veins were well stored with metal; that the ground, being mountainous, admitted of easy drainage, either by adit levels or by water machinery, and that consequently the cost of working was comparatively small. From the reasons adduced, he thought they would all agree with him that a better county than Cardiganshire could not be selected for mining pursuits, or a better mine than Great Darren. Such mines, which for centuries had produced large annual profits—that is to say, when properly conducted and scientifically developed—could not be regarded as speculations; for when so treated they had never been found to disappoint the parties interested in their development. Therefore it was that he solicited the support of his friends to give this old mine a fair trial, and he made bold to say that all who might associate themselves with him in its development would be perfectly satisfied with the results that would be achieved.

Mr. COTTERELL said that he had recently visited Cardiganshire, being interested in the development of a mineral property but a comparatively short distance from that which had been referred to by the previous speakers. It was true he was practically unacquainted with mining; but, taking into consideration that the Great Darren Mine was surrounded by properties that were making good returns, he was willing to lend his support for its development. He was glad to have it in his power to promote the interest of a district which possessed so many and varied recommendations, for in so doing he believed he would benefit himself, and at the same time would be contributing to the development of the mineral resources of the country. He would be the last person to associate himself with any undertaking for the mere purpose of selling the shares at a profit. He had made every enquiry from Capt. Matthew Francis and others, as to the prospective results that were likely to accrue from an energetic development of the property in question, and from the facts he had thus been able to collect, he had satisfied himself that Great Darren would prove to be a good permanent investment. He had a very great objection to raising the value of the property by any fictitious means, but having ascertained that it was a really good investment, he was determined to give his aid to that spirited and efficient development of the property which it deservedly merited, and he implicitly believed it would result in the production of permanent and good dividends.

The CHAIRMAN said, as Capt. Francis was present, who was intimately acquainted, practically and theoretically, with the mineral resources of Cardiganshire, it would doubtless be satisfactory to all present if that gentlemen would acquaint them with his opinion and knowledge of the Great Darren property.

Capt. M. FRANCIS said that the Great Darren Mine was one of the most famous in Cardigan hire. It was worked in the face of a hill, which fronting the north rose 480 ft. above the valley. On its very crest there was an old Roman encampment, which attested the fact that before history chronicled the mineral returns of this country the Darren Mine was prosecuted for the sake of its silver-lead and copper, which made its appearance at the surface of the vein. Subsequent operations had lengthened the excavations upon the great lode, until they had become extended for a distance of three-quarters of a mile, the greater proportion of the development being to the west of the apex of the hill. The returns from this mine had always been very considerable. About 80 years ago a Flintshire company worked it, and obtained a profit of 700*l.* per month; and 20 years since he (Captain Francis) opened the mine, and cleared it of water to the 50 fathom level, when he extracted sufficient silver-lead ore to make a profit of 150*l.* per month, or 1800*l.* per year. That stope was at the present time under water, but as soon as it was cleared they would commence to make a profit of 2000*l.* per annum. It would occupy too much time to enter into the particulars as to the mode to be employed to drain those old works, or what would be required to put the mine into an efficient working system. Suffice it to say that it would be an operation neither expensive nor protracted, as he expected by this time next year so much of the old mine would be drained and put into working order as to enable them to make large profits. He, however, relied more than upon anything else for the greatest income that could be derived from this great work upon the cross-cutting the Cwmsymlog lode, which had proved itself in all cases so rich in silver-lead ore, and which was situated at a main distance of about 50 fms. from the Darren vein. The Cwmsymlog vein had in different ages produced many fortunes, Sir Hugh Myddelton having realised a profit from this vein alone of 20,000*l.* per annum. He (Capt. Francis) had, therefore, very little doubt when this vein was tapped to the depth of 70 yards—which the state of the old Darren Mine would admit of—but that the mine, including both lodes, would become one of if not the richest and most profitable mine in Cardiganshire. They were already raising ore from several bargains at one-half profit; the water was nearly out to the bottom of the engine-shaft in the eastern part of the mine, called Darren Fach; and he expected to set different bargains on this part of the lode immediately. He had seen the lode of silver-lead ore from 8 to 10 ft. wide, for a length of 140 yards to the east and west of this engine-shaft, but it was his opinion that this was but the outcrop of a rich deposit, which subsequent development would prove to be a great mine.

Mr. MILSTED thought, from the statement just made by Captain Francis, it would be seen that the enterprise with which they were about to connect themselves was no mining speculation. It had been seen that there were already a number of men raising ore at a profit, which was, perhaps, the best guarantee that any promoter of a mining enterprise could desire to possess. He had upon previous occasions expressed a favourable opinion of the general features of the country for the conduct of economical and expeditious mining, and the great facilities which Nature had given for a successful development of the mineral resources with which this district abounded, and those facilities offered advantages that few mining districts possessed. He had seen mines in the immediate locality of the Great Darren, which had, upon a comparatively trifling outlay produced large profits; and therefore, in Great Darren they had not only the advantage of rich neighbours, but the property itself possessed the actual veins that had made its neighbour so eminently profitable.

Mr. COCKCRAFT had recently visited the locality, having interested himself in the development of the mineral resources of Cardiganshire. He felt thoroughly satisfied, from what he saw, that mining in that district was divested of the ordinary risks which were said to pertain to mining enterprises. From the position of the Great Darren Mine, he thought there could be no doubt as to its intrinsic value, and he was fully satisfied, from what he had heard in the district, that in Captain Francis they had a most efficient manager, and he had not the slightest doubt but that such results would be achieved as would not cause any regret to those who might become associated with the undertaking.

Mr. SPARGO then read a report that had been received from the mine (which will be found elsewhere). He then read other reports, among which may be mentioned those of Mr. John Hitchins and Capt. Charles Williams, which went to prove that a vigorous development of the property would, in all probability, result in a permanent success.

Several other gentlemen expressed their views upon the property, and promised their support in furtherance of the object for which the meeting had been convened. Before the proceedings concluded a considerable number of the shares were taken.

The usual compliment to the Chairman having been accorded, the proceedings terminated.

PORT PHILLIP AND COLONIAL GOLD MINING COMPANY.

The general meeting of shareholders will be held at the London Tavern, on Wednesday, when the report and accounts, from which we condense the following, will be submitted:

The company's proceedings have gone on at Clunes without interruption. The quantity of quartz crushed between Oct. 1, 1860, and Sept. 30, 1861, has been 32,258 tons, from which the produce has been 24,336 ozs. 6 dwts., being an average of 15·2 dwts. per ton. The quantity crushed during the preceding year was 21,694 tons, and the produce 17,466 ozs., being an average of 16 dwts. per ton. Showing an increase in crushing of 10,564 tons, and in yield of gold of 6870 ozs. over the same period of the previous year. It will be perceived that the yield of gold per ton has experienced a variation of 22 grs., equal to 5¾ per cent. The total expenditure per ton has been 12s.; in the preceding year it was 16s. The expenditure this year includes a considerable sum incurred in additions and permanent improvements, such as the melting-house and materials, large lathe and additions to the fitting shops, a small engine, and fitting up the Chilian mill. The profit on the quartz crushing for the year ending Sept. 30 has been 22,958*l.* 16s. 6d. The quantity of quartz stamped since the commencement of operations at Clunes has been 86,961 tons. In 1857 (six months), 4146 tons; 1858 (twelve months), 13,321 tons; 1859, 17,542 tons; 1860, 21,694 tons; and in 1861, 32,258 tons. The machinery during the year has worked very satisfactorily. The Clunes Mine has during the year been worked energetically: the north shaft is about being sunk deeper, and the mine more extensively opened out. In consequence of its having been stated that an improved process for the treatment of auriferous ores had been devised at Freyberg, in Saxony, and was in operation at a mine in the extreme south of the Prussian territory, two of the members of the board, Mr. Macdonnell and Capt. Vetch, accompanied by a gentleman conversant with the German language, proceeded there in August last. Their journey occupied upwards of six weeks; they obtained all the information in their power on the subject, both at Freyberg and at the mine in question. They afterwards proceeded to Vienna, where they obtained from the able and experienced secretary of the Aulic Council of Mines, Mr. Hocheder, information as to the treatment of the like mineral in the mines belonging to the Austrian diminions. The whole of the information so obtained, together with accounts of the treatment pursued at the company's establishment at Clunes, have been placed in the hands of Dr. Percy, Professor of Metallurgy in the Government School of Mines, in Jermyn-street, by whom the question is undergoing an elaborate investigation. Dr. Percy has required, in addition to the information in his hands, that a portion of the "tailings," or "refuse," remaining after the extraction of the gold shall be brought from Clunes, which has been ordered to be done. In the meanwhile, there is ground for hoping that means will be found by this investigation for diminishing the loss now sustained in the extraction of gold.

The financial statements show that the company have an available balance of assets over liabilities in England, 11,993*l.* 12s. 10d.; and at Melbourne, 1314*l.* 8s. 7d. The reserve fund amounts to 2160*l.* 7s. 11d. New Three per Cents. The balance standing at the credit of profit and loss is 24,780*l.* 1s. 9d., out of which the directors recommend the payment of a dividend of 1s. 6d. per share, payable on Jan. 15, 1862, forming, with the distribution of 1s. per share declared in July last, the fourth dividend, and being at the rate of 12½ per cent. per annum. The subjoined statement shows the position of the company:—

Balance standing at the credit of the capital account, being the amount of capital remaining after charging to the debit of the account the losses sustained in the first years of the company's existence				£30,777	13 2
Balance at credit of profit and loss, being the amount of undivided profit.				24,780	1 9
Reserve fund				2,033	1 0
Total				£57,590	15 11
Clunes Mining Establishment				£35,000	0 0
Materials shipped to Melbourne, not arrived at Clunes				1,606	1 11
Land and buildings at Melbourne				5,000	0 0
Office furniture				181	4 9
Cash at Melbourne				1,314	8 7
Cash and bills in London			£12,830	19 8	
Less to pay on acconnt of fourth dividend			375	0 0 =	12,455 19 8
New Three per Cent. Consols (2160*l.* 7s. 11d.)				2,033	1 0
Total				£57,590	15 11

Mr. Bland remarks that he does not consider it necessary at present to write off anything from the amount standing at the debit of the Clunes Mining Establishment on account of wear and tear. He says, "The machinery is generally in as good order at the close of the year as at the beginning. We are constantly effecting improvements, and all defects are made good as they appear,"—that is to say, out of the revenue of the year. Independently of the foregoing considerations, the accruing increase of the reserve fund will of itself form an indemnity fund against depreciation. The sum standing in the balance-sheet to the credit of the exhibition commissioners (300*l.*) consist of the balance of a sum placed in the hands of Mr. Bland, by the local commissioners at Melbourne, for the purpose of preparing a complete model of the company's works at Clunes, showing the whole of the processes employed in the reduction of the mineral, and the extraction of the gold.

THE COPPER MINES OF LAKE SUPERIOR.

BOSTON, Nov. 30.—Mining shares from the 1st to the 10th inst. were comparatively inactive. After that date the upward tendency of ingot copper gave an impetus to the share market, and prices of the favourite stocks consequently advanced. Ingot copper is firm at 22½ c. cash offered, and 23 c. asked. Even at the latter figure no considerable quantity can be purchased. It is believed that prices must rule much higher in course of the next six months. The last shipments for this season from Lake Superior are on their way to market. From that quarter, therefore, there will be no more receipts till about June 1, 1862. From abroad the importations will be light till commercial affairs are in a more settled state.

AMYGDALOID.—October product, 24,652 lbs. Total shipments this season, 135,611 lbs., or nearly 68 tons rough copper, a remarkable result for a mine which has been wrought for so short a period.

CENTRAL.—The October product was 35 tons, making for the season 162 tons. This is more than twice the shipments of 1860, and the mine will be in a far more flourishing condition at the close of this than of last year. During the winter new openings will be extensively made, while the product, it is anticipated, will be from 20 to 30 tons monthly. Towards the opening of navigation, and from that time through the season of 1862 there may be reasonably anticipated a largely increased product over the present year. The stamping machinery, 16 heads (West's Cornish), has been eminently successful. During October, given as an average result, there were stamped 716 tons of rock, at a cost of 86 c. per ton, including 90 cords of wood at $1·50, for assorting, breaking, teaming from shaft to mill, and stamping. The results of September were about the same. This mine, in its geological position, and in the results of its workings, resembles closely the Cliff. When wrought on a large scale, the returns can scarcely fail to be remunerative.

COPPER FALLS.—October yield, about 27½ tons rough copper, dressed to above 80 per cent. Total shipments for the season, 272 tons rough, or about 229 tons ingot copper.

FRANKLIN.—October product was 174,653 lbs. of rough, or 148,316 lbs. of ingot copper. Total product this season, from close of navigation, Nov. 20, 1860, to same time 1861, and all shipped, has been 708 tons ingot copper.

HANCOCK.—The product from Oct. 1 to Nov. 10, was 9½ tons gross, or 8 tons ingot. The surplus of strictly available assets now on hand, with the winter's earnings, will enable the mine to be largely opened during the next six months. The shipments this season were 56 tons rough, or over 42 tons refined copper.

HURON.—October product, about 8 tons barrel work. The stamps work accumulated through the past season will be at once prepared for the market. The company has shipped this season 108½ tons rough, or nearly 70 tons ingot, against 77½ tons of rough, or 48½ tons ingot last year.

ISLE ROYALE.—October product, 101 tons; an increase of 16 tons over the previous month. Total product for the past season, 529 tons rough copper. The shipments of ingot copper have been about 445 tons. The October cost sheet was about $11,000; adding other expenses, and assuming the ingot copper to be worth 22 c., the nett profits were at least $14,000. From the present condition of the mine it is fair to infer that the winter product will not fall below 50 tons per month.

KNOWLTON.—The product for the season has been about 13 tons of rough copper, in masses and barrel work.

MINESOTA.—September product: Masses, 264,433 lbs.; barrel work, 82,243 lbs.; stamp work, 20,780 lbs.: total, 367,456 lbs., or about 184 tons.

NATIONAL.—The product, from the close of navigation, 1859, to the close of navigation in 1860, was 1,455,418 lbs. rough, yielding in refined or ingot copper 73 90–100 per cent., or 1,078,608 lbs. The cost was $171,521·77, or 15 9–10 c. per lb. The sales, reduced to cash, were $221,517·68, or about 20½ c. per lb. The product, from the close of navigation, 1860, to Sept. 1, 1861, a period of nine months, was 1,502,537 lbs. rough copper, or nearly 50,000 lbs. more than for the previous twelve months. Since the report was made up the returns for September were 107 tons.

PEWABIC.—October returns were 194,478 lbs. rough, or 172,400 lbs. ingot copper. The total product for the season, all of which has been sent to market, 921 tons ingot or refined copper.

PHŒNIX.—The total shipments this season have been about 47 tons rough copper of high percentage.

PITTSBURGH AND BOSTON.—October product was, in masses, 104,775 lbs.; barrel work, 31,659 lbs.; stamp work, 102,311 lbs.: total, 120 tons. Total product for December, 1860, to October, 1861, inclusively, 1434 tons, against 1289 tons last year.

QUINCY.—The October product was, in barrel work and masses, about 75 tons, and in stamp work about 114 tons; total, over 189 tons. During this month there have been shipped 168 tons of the product of November. The total amount of rough copper shipped in 1862 has been 1737 tons. ROCKLAND.—September product was about 42 tons.

SUPERIOR.—September returns, about 2½ tons of masses and barrel work. The stamp work, of which there is a large accumulation, will be made available during the winter.

CLOSING QUOTATIONS.—Central, 5·50 to 5·75; Copper Falls, 4·87 to 5; Franklin, 14·87 to 15; Hancock, 2·75 to 2·87; Isle Royale, 9·75 to 9·87; Mesnard, 1 to 1·25; Minesota, 56·25 to 56·50; National, 29·50 to 30; Petherick, 1·75 to 2; Pewabic, 21 to 22; Pittsburgh, 40 to 43; Quincy, 28 to 29; Rockland, 14·62 to 14·75; Superior, 2 to 2·50; Toltec, 75 to 1·00, assessment unpaid.

DEC. 7.—The last boat of the season arrived at Detroit on the 4th inst., bringing the latest advices from the Ontonagon district. The Minesote Company's product for October was not entirely weighed off. The shipment was about 127 tons, principally masses and barrel work. The Rockland October product was 46 tons; the Superior, nearly 1 ton; the Natiodal, over 83 tons. The market for mining shares is somewhat lower. Ingot copper, sales 22¾ c. cash, with a strong upward tendency.—DUFEE, BECK, AND SAYLES.

TRUTH'S ECHOES; OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market shows an improvement, and a large number of shares have changed hands: probably more purchases were effected on Monday and Tuesday, to meet the requirements of the fortnightly "account-day," which took place on Tuesday last. The settlement appears to have been rather heavy, which ultimately passed off satisfactorily. There were short deliveries of East Caradon, East Carn Brea, and a few other shares, consequently an advance in price followed. There is evidently an improved tone given to the share market generally, although the unsettled state of political matters may delay for a few days the anticipated change. It is reported that the tin smelters have declined to make any purchase until after Jan. 6, when the American ultimatum will have been received: but from present prospects there appears to be very little need of apprehension. There has been a fair business done in SOUTH FRANCES, WHEAL BASSET, COOK'S KITCHEN, SETON, and SOUTH TOLGUS shares.——NORTH BUSY and NORTH ROSEWARNE shares have been in good demand.——CONDURROW and GRAMBLER and ST. AUBYN shares have also changed hands at quoted prices——EAST CARN BREA shares have been extensively dealt in, and although the prices fluctuated at first, they have advanced, and continue to maintain their present prices.——STRAY PARK shares continue much the same as last week, and although they show a lower tendency, they are not plentiful.——WHEAL GRENVILLE and UNY shares have been in good request, and the latter considerably advanced.——NORTH DOWNS shares have declined, and are now more freely offered——ALFORD shares are sought for at present rates.——EAST CARADON shares continue to advance, notwithstanding the efforts made to depress the price; the demand improves.——MARKE VALLEY shares have been in good demand at present quotations.——WEST KITTY DOWN shares are sought for at lower rates.——SOUTH CARADON shares are being enquired for at present price.——WEST CARADON shares have been freely dealt in at lower prices.——LUDCOTT, MARY ANN, TRELAWNY, and HERODSFOOT shares have been in request.——WHEAL EDWARD shares are offered at lower prices, and but few transactions have taken place.——WHEAL ARTHUR shares are enquired for.——HINGSTON DOWN shares are very quiet.——CREBOR and EAST DEVON CONSOLS shares are offered at lower rates.——EAST RUSSELL shares have changed hands at present quotations.——NORTH ROBERT and LADY BERTHA shares are very heavy at minimum rates.——SOBRIDGE shares have been more in request, from a reported improvement in the mine.——WHEAL GRYLLS shares continue to find buyers, and although they are quoted lower than a short time since, they are scarce.——PROSPER UNITED shares show a tendency to improve.——WHEAL MARGARET, PROVIDENCE, and EAST ROSEWARNE shares have been dealt in at present prices.——ROSEWALL HILL and RANSOM shares have changed hands without any improvement in price.

EAST CARADON: The 50 east, on the caunter lode, has improved, and now worth 90*l.* per fathom, and the 60 east is worth full 50*l.* The rise in the west continues in a good course of ore. Fawcett's lode, in the 60 east, is valued at 12*l.* The new lode, recently intersected by the cross-cut south is worth full 30*l.* per fm., and they have commenced driving east. It is really surprising to notice the solicitude with which some persons watch over the interests of their clients, and caution, by their disinterested predictions, the varied phases of this extraordinary lode. Their watchfulness and philanthropy a casual observer would deem a generous kindness, and free from self-interest; but it is apprehended that more of the nature of the Fox is associated with the well-known sensibilities of Bears! The report published last week must not be taken as official, but as a private one, suited to the views of interested parties, which, if correct, would not have been noticed. The only change which had taken place was in the 50 east—Fawcett's lode, then represented *poor*, was, and is still, worth 12*l.* per fm. Whether any importance is to be attached to the new south lode, intersected by the 60 cross-cut, which was 4 feet, and is still, worth 30*l.* per fathom, is best known to practical men, who will, no doubt, appreciate its importance, and place some value upon a lode intersected at that depth, running parallel, as far as seen, with one of the longest and finest courses of ore to be seen in the county, and not even known at surface. The following special report has been received to-day from a well-known and intelligent agent, who inspected, on Wednesday, for a shareholder, in consequence of the report of Capt. Rich, which appeared in the *Mining Journal* of Saturday last:—"*Jan.* 1: I have been underground to-day, and I estimate the different points as follows:—The 50 east is worth full 95*l.* per fm.; the stopes in the back of this level are producing their usual quantities of ore. The 60 east is worth 50*l.* per fm., and I think likely to further improve; the rise in the back of this level, and west of the cross-cut, is worth for the length of the rise 80*l.* per fathom. New Lode: This is a very promising lode, and is worth 30*l.* per fm. Fawcett's lode is worth full 15*l.* per fm., and looking very promising for further improvement. The lode, on the whole, is looking extremely well; indeed, I have inspected it several times, and never found it to look better."

At DEVON CONSOLS they have made an excellent discovery at Wheal Agnes portion of the property: a cross-cut has been put out 35 fms. south from the 70, and intersected a lode worth from 20 to 25 tons per fm. of rich quality ore. This valuable addenda has prompted the management to commence other cross-cuts, with a view of intersecting the lode at different important points.

GREAT TREGUNE: It is stated in the locality of the mine that the lode in the 80 west has very considerably improved during the week, and from appearances likely to make a great discovery; the lode is 4½ feet wide, with 2 feet of excellent ore. The eastern end and stopes are worth more than the previous week. The best stopes in the mine are between the 70 and 80 fm. levels west, which are yet untouched.——NORTH TRESKERBY: The bottom end is reported to be opening larger, and looking well for a great improvement; and a rumour prevailed in the locality that a course of ore had come into the end, but as it has not been confirmed it would be premature to state it.——EAST ROSEWARNE is represented to be looking very promising. The 55 fm. level west is worth 8*l.* per fm., and other productive places bid fair for improvement: 82 tons of copper were sampled last week, estimated to be worth 8*l.* per ton. They have commenced fixing flat-rods to be connected with the engine, for the purpose of draining the above lode.——WHEAL GRYLLS: At Annie's engine-shaft, a slide which had disordered the ground has been passed through, and a promising lode of tin is coming in. A slide has also been met with in Georgia shaft, producing a similar effect, but improvements are expected as soon as they have gone beyond its influence. The back of the 20 is stated to have fallen off in value, whilst other places continue much the same as before. Since writing the above a more favourable report has been received, stating that the lode in Annie's shaft, under the slide, has much improved, and other places very considerably.

GREAT RETALLACK shows some slight improvement for lead, but a great depth is required before anything of a positive character can be arrived at. The blende sold does not afford any profitable return, the 480 tons realising only 24*s.* per ton.——WHEAL KITTY is represented as looking promising for an early improvement, especially in the 30.——TRUMPET UNITED is producing some good work for tin in the 15 and 25, but the lode is small.——WHEAL GRENVILLE is reported to have improved in the 100 west, where the lode is producing from 1½ to 2 tons of good ore per fm. The 110 is also looking better, and several other points have a more encouraging appearance.——EAST GRENVILLE continues much the same as for the past few weeks; the several points of operation continue to look very promising.——At WHEAL HARRIETT there appears to be some very important points to come off shortly. The lode in the 100 was one of great value for a considerable distance; and although of but little importance now, is likely to become so in the 115, being the next level. The 115 end east is 55 fms. behind the 100, and the lode is daily improving, thereby showing that the course of tin is lengthening as it goes down: and it is further calculated that the lode will fall into the engine-shaft about 6 fms. deeper, which is now down about 6 fms. below the 115; consequently on reaching that depth is looked for with anxiety.——WEST SETON is reported to have improved in two important points—at the 28, west of cross-course, which is the most western end in the 120 west; but more must be seen of the ends before much can be said of its prospects. JAMES LANE.

From Mr. EDWARD COOKE:—The new year has commenced auspiciously, and full of hope for the future for legitimate mining enterprise. During the year just ended the mining interest has not been barren of good results to the investor in this class of property. The most prominent among the successful mines is decidedly EAST CARADON. This property is still recognised as a first-class investment, notwithstanding all the endeavours by advertisements and circulation of Circulars, on the part of those who would seem to be the watchful guardians of the public, to depreciate its merits. I am of opinion that there is ample scope for their talent, if they are really desirous of employing it for the benefit of the public, by criticising the many worthless schemes that are constantly being brought out, without expending it in depreciating a property that has contributed more for the encouragement of legitimate mining, during the past 12 months, than any other in the list. The Caradon district is teeming with mineral riches, and 1862 will witness other prizes in this locality, resulting from mines that are thought but little of by the general public at this moment. If I touch upon EAST CARN BREA, it cannot be said that I now do so for the first time. On many former occasions I have endeavoured, to the best of my humble ability, to place its real merits before my readers. It has since been done by more able writers, therefore it would be superfluous to enlarge upon the future prospects of this sterling property. Adjoining this mine is WHEAL UNY, which has been mentioned in my former remarks on several occasions. I believe it to be capable, under a new and more spirited management, to make a good paying mine. WHEAL MOYLE and EAST DAMSEL are both progressing well. The former is working at a profit, while the chances of a good lode in the 30 fm. level should encourage the shareholders to hold on their interest. If Wheal Moyle does not become a great mine, I shall be very much disappointed, and not only myself, but many practical agents, who know its real merits, and the rich district in which it is situated. WHEAL GRYLLS shares have receded in price, and this is not at all unreasonable, after the rapid advance in price that took place. I have the fullest confidence in the mine, and am sanguine enough to believe that the shares will not only recover what they have declined, but that they will soon be higher than they have ever yet been. Time will show how far I am correct. Hoping that my occasional remarks are appreciated by a numerous class of the readers of the Journal, I am encouraged to continue them, and trust that they may not prove unprofitable to those who peruse them for the future. My aim has been, and ever will be, to bring before the notice of the readers of the Journal such mines as I know to be deserving of attention, and studiously avoid making invidious comparisons, or naming mines that should be avoided, as the latter is a subject for a broker and his client. The standard having advanced, and more peaceable news received from America, the chances of a rise in good dividend and progressive mines are quite apparent, and many in the list are quite safe for investment at present prices.

From Mr. PETER WATSON'S "Annual Mining Review" for 1861:—The year 1861 will long be remembered as one of dire misfortune in almost every branch of industry—opening gloomily, so continuing, and closing with a nation's agonising terror. The effects of the bad harvest of 1860 were only in the early part of last year beginning to be felt, and in a winter of more than average severity. American affairs, financially and commercially, unsatisfactory during the entire year, have been lamentably aggravated by the dreadful struggle between the Northern and Southern States, and the question now pending between the Washington Government and this country has almost extinguished monetary and commercial transactions between the respective countries. As a proof of this, we find that the export of goods from this country to the United States for the first nine months of last year was only 6,472,753*l.*, against 13,761,014*l.* in the same period of 1860, and 17,128,062*l.* for 1859. The exports of tin, iron, and lead, in the different forms of manufacture, have suffered even to a greater extent; and it is surprising that, notwithstanding the serious depreciation in prices of these articles, much lower figures have not been succumbed to. We find, however, that increased and increasing demand has arisen for other countries, which, in some measure, has supported prices above expectation. It is shown clearly that in both the Federal and Confederate States the stocks of the metals referred to are very low; indeed, they may be almost called *nil*. Therefore, in the event of a peaceful solution of the question between our Government and that of President Lincoln, there will, doubtless, be a great demand for metals, and copper and tin especially will most likely command much higher prices than for many years past. The sad havoc and depreciation in the prices of shares in mines during the last year is almost without its equal. There has been a much greater degree of disappointment regarding points of operation, which had induced the anticipation of important discoveries, whilst calls have been increased and dividends passed. As usual, there have been great fluctuations in shares, as will be seen by a reference to my List, which will hereafter be published. With a prospect of peace, abundance of money, public confidence, better prices for metals, and a legitimate and vigorous working of such mines as present features favourable to success, we may fairly look for mining and those who have invested in it such results in the present as will more than compensate for the reverses in the past year.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending December 29 was 10,484*l.* 7*s.* 7*d.*

FOREIGN MINES.

COPIAPO.—G. Matthews, Nov. 15: Checo Mine: The stope in the back of the 40 has become poor. In the stope in the back of the 30 north the lode is poor. We shall now commence to sink a new chiffon from the bottom of the 20, on the north lode. The rise in the back of the 40 is producing 1 ton of 17 per cent. ore per fm., and in expectations of further improvements. The lode in the new chiffon is just the same as last reported. The lode in the chiffon sinking under the 40 is still 3 ft. wide, 2 feet of which is ore of 25 per cent.—a good lode of ore. In the 20, on main south lode, the lode in the chiffon sinking east is much the same as when last reported. We have not as yet done anything in the western sett. On the whole, the mine is very kindly.

UNITED MEXICAN.—Guanaxuato, Nov. 21: Mine of Jesus Maria y Jose: The workings of this mine continue in a very satisfactory state, and there is a great probability that good ore will be found still higher than the present works. Of the upper frentes, that of San Nicholas is good and improving, and San Andre's has just reached a little very rich ore, and gives promise of yielding well. San Roberto is very good. The last new works are very near the old shaft, and it is, therefore, in contemplation to repair it, and bring it again into use, by putting up a malacate (horse-whim); this will lessen the expense of raising the ore, &c., from the last new works, and from others which are likely to be opened at a still higher level; and will be desirable also on account of the present malacates, and the new shaft being scarcely equal to the work required, as the general extraction is increasing. The other works, San Pantaleon, &c., which for so long have been yielding largely, appear to have nearly reached the point to the north at which the ore ceases; but they have been driven to a length of about 100 varas, and from their great width continue to give a great deal of fair ore, which extends along nearly the whole length. In four weeks the extraction by regular miners has been 6816 cargas, of which 2060 cargas (the best class) have been sold for $18,956. And the buscones' sales have given $7465, half to the credit of the mine. The profit on October is $11,910; it would have been larger, but that I have purchased a reserve of iron and steel, on the probability of a rise in the price of these articles. A raspa has again been received from Casas Blancas to come into the present month's account, value $6574; the ley of gold 2329 grs. per mare. A raspa from Duran also will shortly be received.—Mine of La Trinidad: The cross-cut has reached the vein, but as yet no ore appears.—Remittance: A conducta will probably be dispatched early in January, by which I shall remit to the directors, if the risk be not too great.

MARIQUITA AND NEW GRANADA.—Santa Ana Mines: No profit and loss account. Returns for September, $12,421; ditto for October, about $10,000.—Marmato mines for August cost $7414; returns, $6425: September cost, $6697; returns, $6816. The Santa Ana superintendent (Mr. Birchall) writes:—I went into the mine, and inspected the whole of the underground workings and stations. The appearance of the mine is in the highest degree satisfactory. The lode in the back of the 110 fathom level, in the end work of same level, and in the winze now sunk about 5 fms. towards the 120, presents an abundant supply of rich mineral for a long time to come. Until we can get the new shaft into operation, the establishment must remain cramped in its resources, and the proprietary must be deprived of the benefits they have a right to expect from their property. That once accomplished, I repeat, confirm, and extend the assurances I had the honour to make to them personally in July last; whatever hopes were then held out of the future prospects of the Santa Ana Mine may now be regarded as having entered the region of certainty. We know now that we have riches in hand beyond anything that former experiences of this mine indicated.

LINARES.—Dec. 21: West of Engine-shaft—South Lode: In the 95, west of Seguro's winze, the north wall of the north lode will be reached in a few days, we expect, when no doubt there will be an improvement. There is nothing new in the 85, west of Seville winze, worthy of notice. The lode in the 61, east of Warne's engine-shaft, is small and poor. The 61, west of Warne's shaft, is worth 1¼ ton per fathom—lode large, and of a very kindly appearance. The lode in the 51, west of Tobernota winze, is very compact, and worth 1 ton per fathom. The lode in the 41, west of Crosby's shaft, is large, and worth 1 ton per fm. The 31, west of San Francisco shaft, is worth ½ ton per fm. The same level, east of ditto, is also worth ¼ ton per fm.—East of Engine-shaft—South Lode: The 95, east of La Suerta winze, is worth 2 tons per fm. The 85, east of Ramiro's winze, is worth 1¼ ton per fm.—lode rather variable. The 75, east of Taylor's cross-cut, has entered a piece of disarranged ground, consequently the lode is unproductive.—North Lode: The 75, east of Ordonez winze, is worth 2 tons per fm. The 65, east of Damaso's winze, is worth 1½ ton per fm. The most interesting feature in this level is the northerly bearing of the lode, which, if it continues, will carry the end north of anything hitherto seen in the mine.—Shafts and Winzes: The sumpmen having fixed pentthouse, &c., in the engine-shaft, are sinking and cutting down ground for cistern. San Francisco shaft has attained the required depth for the 31. Ochoa's winze is worth 1½ ton per fm. Casa's winze is passing through the piece of disarranged ground alluded to in the 75. Nicolas' winze is worth 2 tons per fm.; the lode is large and powerful, consisting of carbonate of lime and lead ore. Marin's winze is worth ½ ton per fm.—lode small and regular.

FORTUNA.—Canada Incosa—West of Taylor's Engine-shaft, Dec. 21: The lode in the 7th level, west of Gomez winze, is looking very kindly, and we hope will soon open tribute ground. The 6th level, west of O'Shea's shaft, is worth 1 ton per fathom; the lode in this end continues very small. The 5th level, west of Henty's shaft, is worth ¾ ton per fathom; the lode is of a very promising appearance, and easy for driving. The 4th level, west of Rendon's winze, is worth ½ ton per fathom. The main part of the lode in the 3d level, west of Judd's shaft, has been intersected, but it is unproductive at this point.—East of Taylor's Engine-shaft: The 4th level, east of Lowndo's shaft, is worth 1½ ton per fathom; the lode is of a very promising and productive character. The same level, west of Donaigre's winze, is also worth 1½ ton per fathom. The 3d level, east of Carro's shaft, is worth 2 tons per fathom; this level continues to open very valuable ground. The lode in the 2d level, east of Bartolome's winze, is small and poor.—Shafts and Winzes: O'Shea's shaft is worth ½ ton per fathom. El Clavel winze is worth 2½ tons per fathom; lode very promising. Suez winze is worth 1½ ton per fathom; the lode continues very regular. Canton's winze is holed to the 4th level.—Los Salido's Mine: The 5th level, east of Antonio's winze, has reached the cross-course; the lode is, no doubt, thrown north, and the men are put to open in that direction, and are making good progress in driving through the elvan course in the 5th level, west of Fernandez winze. The 4th level, west of Salvador's winze, is worth ¾ ton per fathom; the lode is again improving, and we hope will shortly open some valuable ground. The same level, east of Cologan's shaft, is worth ¾ ton per fathom. In the same level, west of San Pablo's shaft, the lode is very small, and the ground hard for driving. The same level, east of San Pablo's shaft, is worth 1¼ ton per fathom; lode looking very kindly. The lode in the 3d level, east of Muno's winze, contains good stones of lead, but not enough to value. The same level, west of Buenos Amigos shaft, is worth 2½ ton per fathom.—Shafts and Winzes: Morris's engine-shaft is worth 5 tons per fathom. San Gabriel shaft will reach the 5th level in a few days; a short cross-cut will be required to effect a communication. Olalla's winze is holed to the 4th level. Gea's winze is worth ¾ ton per fathom; the lode is divided into two branches, and the ground is rather hard for sinking. The lode in Lopez winze is looking very promising indeed, and is worth 1 ton per fathom.

CLARENDON CONSOLS.—J. Martin, Dec. 6.—Stamford Hill Mine: The lode at the 94, south-west of shaft, is about 2 ft. wide, poor; the men are now employed putting in the new lift; we cannot do anything towards driving this end until we have completed the plunger, which I expect will be in the course of next week. We have commenced sinking the winze below the 82; the lode is 4 feet wide, with veins of ore, but not enough to value. The ground in the cross-cut north-west is without any alteration to notice. We have stopped the stoping in the back of the 82 for the present, on account of sinking the winze; the orey ground that we want to take away is just over where we are sinking the winze; so soon as the winze is holed we shall commence the stoping again. In the 70, south-west, the lode is about 3 ft. wide, but poor; we have had a very great change in the end for the last 6 feet driving; the lode is looking very kindly, and letting out a quantity of water; I think we must be getting under the same run of kindly ground we had in the 46. The lode in the 46, south-west, is about 3 feet wide, composed of gossan and priaux, with veins of yellow copper ore, but not so good as last reported; by the appearance of the lode and the rock about it, it will soon improve. The weather is a little better, but the roads are still very bad from the late heavy rains. We have cut a large stream of water in the 70, which has very much increased the water on the engine; there we shall lose no time in getting the plunger-lift to work.

LUSITANIAN.—Dec. 24: Palhal Mine—Basto's Lode: The lode has not been taken down in Taylor's shaft, below the 60, since our last. In the 60, east of Taylor's shaft, the lode is worth 3 tons per fathom; in the same level west the lode has not been taken down, but the wall is looking very favourable. In the 50, west of Taylor's shaft, the lode is worth 1½ ton per fm. In the 38, west of Taylor's shaft, the lode is worth 2 tons per fm. In the 28, west of the slide lode, the lode is 6 in. wide, producing small stones of ore. In the 8, east of Perez' shaft, the lode is unproductive; the lode is the same level, west of Abel's winze, is 1 ft. wide, producing stones of mundic. In the adit level, west of Perez' shaft, the lode is 6 in. wide, worth ½ ton of good ore per fm. In Joaquin's winze, below the 50, the lode is worth 2½ tons per fm. In the stopes No. 1, above the 50, west of Ernesto's winze, the lode is worth 1 ton per fathom. In the stopes No. 2, above the 38, west of Clondino's winze, the lode is worth 2 tons per fm. In the stopes No. 4, below the 28, west of Clondino's winze, the lode is worth 1 ton per fm. In the stopes No. 5, above the 50, west of Jackson's winze, lode worth 2 tons per fm. In the stopes No. 6, above the 50, east of Jackson's winze, lode worth 1 ton per fm. In the stopes No. 9, above the adit level, west of Perez' shaft, lode worth 1½ ton per fm.—Mill Lode: The lode in the 50, west of River shaft, is 6 in. wide, composed of flookan. In the 38, east of Taylor's shaft, the lode is 1½ ft. wide, worth ½ ton of ore per fathom. In the stopes No. 10, above the 18, the lode is worth ¾ ton per fathom. In the stopes No. 11, above the 38, west of the caunter lode, the lode is worth 2 tons per fathom. In the stopes No. 14, above the 50, west of River shaft, the lode is worth 1½ ton per fm. In the stopes No. 15, above the 38, east of Roderique's winze, the lode is worth 2 tons per fathom.—Caunter Lode: In the 50, west of Taylor's, the lode is small and poor. In the 38, west of the Mill lode, the lode is worth 1 ton per fm. In the 18, west of the Mill lode, the lode is 1 ft. wide, producing good stones of ore. The lode in Luiz winze, below the 38, is small and unproductive.—Great Caunter Lode: In the 40, west of Oak shaft, the lode is 9 inches wide, composed of quartz and flookan. In the stopes No. 13, above the 20, west of the slide lode, west of Oak shaft, the lode is worth ½ ton per fm. In the stopes No. 12, above the 20 fm. level, west of Oak shaft, the lode is worth ¾ ton per fm.—Slide Lode: In the 28, west of the Mill lode, the lode is 2½ ft. wide, composed of flookan.—Carvalhal Mine: At the incline shaft, below the 10, the lode is large, and producing good stones of lead. In the 10, east of the incline shaft, the lode is 1½ ft. wide, composed of quartz, mundic, and stones of lead.

The EAST DEL REY COMPANY has received advices, per the *Oneida*, from Captain William Treloar, the company's superintendent and chief mining captain, which states that he and his staff of miners and artizans arrived at Sabara on Nov. 23. He was making arrangements that he hoped would enable him to commence operations in a very short time. Upon the whole, the despatches are highly satisfactory.

SOUTH AUSTRALIAN ORE-REDUCTION COMPANY.—A company, bearing this title, has been formed in Adelaide for working the process for reducing copper and other ores patented by Mr. R. V. Rodda. The essential feature of the process, which has already been described in the *Mining Journal*, is that an immense saving of fuel is effected, the metallic portions of the ore alone being fused, the subsequent separation of the earthy or siliceous portions being effected by crushing and washing. Negociations are pending with the Burra Burra Company for 50,000 tons of low class ore, upon terms which will enable a profit of 77,500*l.* Thus, 50,000 tons of 5 per cent. ore will yield 2500 tons of copper, worth 212,500*l.*; the cost of reduction (at 1*l.* 9*s.* per ton of ore) will be 72,500*l.*, and the cost of the ore 62,500*l.*, leaving the profit as stated above. In addition to this large profits may be anticipated from arrangements with other mining companies. In the distant northern mines, especially where reduction of weight is of such vast consequence, Mr. Rodda's process will, it is said, be of peculiar value, and overtures have already been made upon the subject by gentlemen interested in mining operations in those localities.

AURIFEROUS ROCKS OF VICTORIA.—The area of the quartz-bearing rocks at Victoria, in Australia, is estimated at 25,000 square miles. The total area of the extent of land at present mined upon in that colony is 561 square miles. Thus 89,920 square acres have produced gold to the amount of 92,737,336*l.*, on an average of about 1032*l.* per acre, and there yet remains upwards of 15,000,000 acres almost every where intersected by quartz veins of greater or less thickness, which are as yet intact by the pick of the miner.

Mining Correspondence.

BRITISH MINES.

ABERNANT.—R. Williams, Dec. 18: Having inspected the above mine, I beg to hand you the following report:—I find a strong lode has been opened upon for about 50 fathoms in length, and at every point where so opened it produces rich lead ore, but there are two points deeper than the others, and at those the production of ore is greater than elsewhere. This lode is of a hard, masterly character, and from 5 to 6 feet wide. The ore is not found, as in many cases, collected in what is called a leader, or separate part, but is scattered in branches and spots throughout the mass, and it is, therefore, somewhat difficult to form an estimate of its real value, and this difficulty is greater in consequence of the operations of the present company being so limited that the bottom of the old workings, for the whole width of the lode, has scarcely been reached. However, from the appearances presented where the lode has been most seen, I, after due reflection, come to the following conclusion:—That if the mine were opened to a sufficient extent to enable 24 men to stope the backs on such a lode, a return of from 30 to 40 tons of ore per month might be made. While speaking under this head, I wish to be distinctly understood, and in order thereto, I repeat that my calculation is based on the opening of the mine to the extent named on a lode of a similar description to that which I have seen to-day.—Quality of the Ore: From the very fine grain of the ore, one is led to suppose it to be strongly argentiferous, and if so the price would, of course, be very good, probably upwards of 20*l.* per ton.—Mode of Operations: In reference to the future working, I would remark that there can be no possible objection to the laying open the back of a lode to show its general character, but after that has been done, the force should be concentrated on some specific point, and to this end I advise, and strongly recommend, the sinking of the eastern pit, in which some men are at work, as a proper shaft, by a full force of men, and get it down as fast as possible, to fully prove the character and productiveness of the lode; meantime, put another force of men at the most desirable point in the brook, to drive in a short cross-cut to the lode, and then drive west on its course towards the proposed shaft. The piercing of the lode by this operation will, doubtless, unwater the shaft to the depth of this level, and enable it to be sunk with dispatch. Sufficient ore will be found in the prosecution of these points to pay the expenses, and it will lay open ground which will ultimately be returned at a great profit.—Mode of Payment: While I am aware of the difficulty altogether clear of the system of day work in mining, I am strongly impressed with the idea that, so far as possible, the contract system should be introduced, as being more satisfactory to the employer and employed.—Prospective: In speaking prospectively of this grant or sett, I would remark that it is exceedingly clear to me that there are other lodes within a short distance to the north of No. 1, for in going east through the wood, a little beyond your boundary an old mine appears (Aberfood Mine), and on the back are to be seen some good stones of lead ore, which are evidently from another lode not far to the north of No. 1. It also appears that the ground in the hill, east of the brook, is of a softer nature than on the west side; I will not say that it is more congenial for the production of ore, but I would advise that the lodes in the eastern hill be seen by shoading on the back, after which the operations on this part might be determined on. I may mention here that they seem to be the same as West Silver Bank, and I am fully persuaded that other lodes are lying unseen a little to the north of the West Silver Bank lode. I would suggest that a small building (or rather house) be erected, or rented, as an office, &c., for the safe keeping of the necessary materials for the men, and a smith's shop. In reviewing all the circumstances in connection with this grant, I cannot but say the prospects are such as to guarantee the certainty of its becoming a great and lasting mine.

ALFRED CONSOLS.—S. Thomas, Thos. Hosking, Jan. 1: The main lode in the 160, driving east of Davey's engine-shaft, is producing ore, but not to value. The lode in the same level, driving west, is producing spots of ore and mundic. The lode in the 150, driving east of the above shaft, is worth 5*l.* per fm., and likely to improve. The north lode in the 140, driving east, is producing ore, but not to value. Roberts's stope, in the back of the 140, is worth 20*l.* per fm. Taylor's stope, in bottom of said level, is worth 14*l.* per fm. Richards's stope, in back of the 140, is worth 12*l.* per fathom. The north branch in the 130 west is producing ore, but not to value. The rise in back of the 130 is poor. Uren's stope, in back of the 140, is worth 7*l.* per fm. Floyd's stope in back of the 120, on main lode, is worth 10*l.* per fm. Nancarrow's stope, in back of said level, is worth 8*l.* per fm. In the 80, driving west of Field's shaft, the lode is producing a small quantity of ore and mundic, but not to value.

ALLT-Y-CRIB.—J. Boundy, Dec. 26: Agreeably with your request, I have inspected the above mine, and beg to hand you my report thereon:—I first went over the hill at surface, on the back of the east and west lode, in the old mine; at this point, the western part of your set, several pits have been opened up on the back of this lode, evidently showing that good lead had been raised therefrom. About 60 fathoms further east, on the same lode, a shaft has been opened to the depth of about 18 fathoms from surface; from the bottom of this shaft a level has been cleared west, leading to the old workings, about 40 fathoms—the lode in the present end is about 9 in. wide, of a very congenial character, although at present there is not sufficient lead to value. This end should be pushed on west, where from the nature of the ground, and the present appearance of the lode, the chances of success, in my opinion, are very favourable. In clearing the old stuff broken by the former party good lumps of lead ore have been found. All the old stuff broken over the back of this level might be let on tribute, and the side branches taken away, which I think would pay well. Had the old level, which has recently been cleared out, been wide enough to admit of a small wagon, the cost of cutting ground and putting in railroad would be about 25*l.* No. 2 adit, on the north and south lode, has been extended about 30 fathoms from the winze; the lode in the end at present is small, being disordered by a side joint. About 6 feet behind the end, both in the back and bottom of the level, there is to be seen a good rib of lead for some length, valued at 6 cwts. per fathom; this piece of ground should be let on tribute, by doing so it will prove the ground over the back of this level, whether the ore seen in the level over makes down or not. This level should be driven further on. About 3 fathoms behind the end a cross-cut has been driven east 3 fathoms; the lode at this point appears to be very wide, showing small spot of ore; I should recommend this to be driven a little further on, to prove the width of the lode at this point. In No. 3 adit, on the north and south lode, the lode in the end is about 3 feet wide, and poor at present for mineral; this for the present is suspended.—Deep Adit: This has been extended from its mouth upwards of 300 fathoms on the course of the east and west lode; for some time past the lode in this level has been disordered in consequence of a soft channel of ground, but at present there appears to be a change taking place in the ground for the better. The lode in the end is about 15 in. wide, composed of clay-slate, carbonate of lime, and showing small spots of lead ore, but not enough at present to value. The ground in the end is getting more mineralised. This end has to be driven about 50 fathoms further west to get under the old men's workings, seen on the top of the hill, where I think the chances of meeting with fresh deposits of ore are very favourable. In conclusion, I beg to remark that I consider this mine is worthy of a further trial, especially in the western part of your sett, on the east and west lode, and it is my opinion that it only requires time to open out and make it a permanent one.

BEDFORD CONSOLS.—Capt. Mitchell, Jan. 2: In the middle adit level the north lode is at present poor, but the ground by the side of the lode is congenial for mineral, and the joints in the country are strongly stained with greens of copper, which indicates that a bunch of ore exists some where near this point. The No. 1 south lode is being cut into about 18 inches, but it being so near the cross-course we cannot say much about it yet; so far as seen it is composed of peach, mundic, and spots of copper ore. In the cross-cut north, east of the air-shaft, the ground is bespangled with branches of spar, containing a little mundic and copper ore, which indicates that a part of the lode is still standing in that direction. All other points continue without change to notice.

BEDFORD UNITED.—J. Phillips, Dec. 31: The lode in the 115 west is 2 ft. wide and worth 2 tons of ore per fm. We have not taken down the lode in the 103 east; the lode in this level west is worth 3 tons of ore per fm. The stopes throughout the mine continue to yield as last reported.

BIRCH TOR AND VITIFER.—Capt. Symons, Dec. 28: Hambley's Shaft: Nothing done in the 24 east; the men are about the adit. In the 24, on north lode, the lode not taken down. In the rise in back of the 24 the lode has improved; good branch of tin 6 inches wide. In the 12, on north lode, the lode not taken down; pitches in this part of the mine producing good work.—Lance's Shaft: In the 12 east the lode is small and poor. In the 12 west the lode is from 12 to 15 inches wide, with strong spots of tin. In the deep adit east no particular alteration. In the cross-cut, north of Lance's lode, no lode cut yet, but the water is issuing very strong out of the end, which makes me think that we are getting near a lode. The pitches in this part of the mine are much the same as when last reported.

BORRODALE.—W. Dixon, Jan. 2: The working on Walton's stage, in cross-cutting, we have driven through the waddy pipe, and are now rising, and have discovered some wadd in this direction. The working on Gill's stage is the same as last reported.

BOTTLE HILL.—J. Eddy, Dec. 30: Our pay and setting was on Friday last; our setting was as follows:—The tribute on the main lode, east of the old engine-shaft, and back of the 12, is let to four men, on tribute, at 13*s.* 4*d.* in 1*l.*; also a pitch east of Vigur's, on the main lode, in the back of the 24, to five men on tribute, at 13*s.* 4*d.* in 1*l.*; also a pitch east of Josiah's shaft, on the main lode, in back of the 12, to three men, on tribute, at 13*s.* 4*d.* in 1*l.*—Bucking-house Lode: We set a pitch in the back of the 24, east of Bucking-house shaft, to four men, on tribute, at 13*s.* 4*d.* in 1*l.*; in driving this level east of cross-cut we met with a run of tin ground for about 4 fms. long, it continued good for about 2 fms. high; this shoot of tin appears to lengthen in depth; Mr. Crooker and myself thought it advisable to drive in a cross-cut at the 34 to prove whether this shoot of tin continues to make good at this depth; we have about 8 fms. to drive to prove this. We let this cross-cut to four men, on Friday last, at 60*s.* per fm. I hope to see this lode at this point in about six weeks, if the ground continues as we have it at present.—Blanchard's Lode: We set a pitch to three men in the back of the 24, west of caunter branch, tribute 13*s.* 4*d.* in 1*l.*—Robert's Lode: We set a pitch east of cross-cut, in the back of the 17, to four men, on tribute, at 13*s.* 4*d.* in 1*l.*—South Lode: We have six men clearing this adit, and cleared about 40 fms.; since the floods we have found it very troublesome for going through. We have about 8 fms. more to clear before we reach the new shaft; I hope to do this in about a fortnight from this time. When this is completed we shall again resume our sinking to get under the ancients' working as soon as possible; we have met with a small arch here and there in clearing our level left, very small but very good; the arches left for securing the ground, and the backs, taken away for full 40 fms. in length. I expect soon after we commence sinking to find something good. I hear from Mr. Croker that you intend to have the mine inspected; I only wish you would first allow me to clear the adit to the shaft, so as to let down the water, that the party may see the lode in the bottom of the shaft, after which it would be a pleasure to me to meet anyone whom you may feel inclined to send. We are now burning and dressing the owners' tin; I hope in about a fortnight from this time to send away samples, if the frost does not interfere (say, 5 tons), we shall then have a great quantity of tinstuff left on the mine belonging to the company not stamped. I hope, if the water continues as we have had it for this month past, still to keep one stamp on the company's tinstuff, so as to soon get on with another parcel. I confess this tin might have been brought about before, but you are aware we have all through the summer had a very short supply of water, not sufficient to keep off the tinstuff broken by the tributers, and we have been constantly subsisting them, some parts as long as six months; now, if they should not have risen tin enough to balance their subsist, the adventurers must meet the loss. For this reason, I have always had a desire to keep the tributers' stuff up close, so as to see the company safe.

BRYNFORD HALL.—Jan. 2: North Cross-cut from Page's Shaft: We have cut more strings of spar, and the beds appear more promising for ore.—Milwr Vein: We are in strong beds of limestone at the forebreast of the 160 yard level, but the vein is very small. Bostock's pipes are without alteration since my last.—Lloyd's Vein: The 80 yard level north-east is still in very hard ground, and the vein is very small. Simon's vein has improved very much. We shall commence working on the vein on Monday next.—Granger's Shaft: The 70 yard level south-west is in very promising ground, yielding good lumps of ore, and I fully expect it to pay well this month. The whim at the bottom of the sump below the 86 yard level is 3 ft. wide, composed of clay, spar, and good lumps of ore. No alteration worth noticing in any other part of the mine.

BRYNTAIL.—J. Roach: The 25 fm. level west has reached the gritstone, which is dipping west 5 or 6 feet per fathom; under this we have found stones of ore to-day. It will take us three or four days to see the lode, when I will let you know what it is composed of; I expect a good lode. The stope above the 10 is suspended. I am now getting all the stuff off the stull and conveying it to the dressing-floors. I will send off the ore as quickly as possible. There is no alteration in other points in the mine since I wrote you last.

BULLER AND BASSET UNITED.—W. Pascoe, S. S. Bice, Jan. 1: In the 100 fm. level east, the lode is 2½ ft. wide, chiefly made up of mundic, with quartz, capel, &c.; price for driving 5l. 15s. per fm. In the 100 fm. level west, the lode is from 2 to 3 ft. wide, with a kindly appearance for mineral; price for driving 5l. 10s. per fm. The lode in the 80 fm. level west is 3½ ft. wide, composed of quartz, blende, chlorite, with occasional stones of copper ore; a promising lode, and in a good channel of ground, which in this district we consider an important feature in favour of mineral; the price for driving is 5l. 10s. per fm. In the 60 fm. level west, the ground has proved very favourable for driving; the lode is large, with an underlie of 2 ft. in 1 fm.; its constituent properties are of the most kindly description, and occasionally producing stones of copper ore; there is scarcely any of that irony-nature substance here, we can thus see in extending our workings westerly that the channel or run of ground is improved, which is encouraging, and helping us to moderate the cost in driving; we are now giving 4l. 10s. per fm. Our workings are being carried out spiritedly, and with due regard to economy. In judging from the present appearances, as seen in development, we are led still to expect greater improvements and success.

CARADON CONSOLS.—W. Rich, Dec. 31: The Menadue lode, in the 54 east, is 2½ ft. wide, and carries fluor-spar and good stones of yellow ore, a very promising lode. Going west the lode is 3 ft. wide, composed of peach, mundic, fluor-spar, and a small leader of good quality ore on the footwall; the ground is easier for driving than it has been, and looks kindly. The north lode is poor, and ground hard; I have taken the men from this place, and have put them to sink below the 54, on the main lode, for a short time, until we get ready to drive in the 68. The shaftmen are busily engaged casing and dividing the shaft, which is being urged on as fast as possible.

CARDIGAN CONSOLS.—J. Sanders, Dec. 28: In the adit, driving east on copper lode, east of Bog shaft, the lode for the last 2 fms. driving has been poor, but I am glad to say it is improving again, and yielding at present some good quality copper ore. All other points of operation are without change to notice since my last report.

CARMARTHEN UNITED.—R. Sanders, Dec. 30: During the last month the following work has been done:—The engine-shaft sunk 4 fms. 0 ft. 6 in.; the 42 driven north 4 ft. 6 in.; the 32 driven north, on the caunter, 3 ft. 2 ft. 6 in.; stoped in back of the 42, 7 fms.; stoped in bottom of the 22, 4 fms. We have also had two men working in back of the 32, on tribute at 4l. 10s. per ton of lead ore. Saturday last being our pay and setting-day, the following bargains were set:—The 42 to drive north by two men for the month, at 4l. per fm.; the lode is at present unproductive, but the water is issuing strongly from the bottom of the end, which I consider to be a good indication of soon having a change for the better. To stope the back of the 42 by four men, for the month, at 55s. per fm., lode producing about 18 cwts. of lead per fm. To drive the 32 north, on the caunter, by two men, 2 fms., at 55s. per fathom; lode still unproductive, but getting more settled, with a promising appearance. To stope the bottom of the 22 by two men, for the month, at 3l. per cubic fathom, lode producing 14 cwts. of lead per fathom. We have also nine men sinking the engine-shaft, who, having taken the lift to complete to the 54 as a lump bargain, will go on as formerly. The tributers having taken their pitch for two months, will go on until the end of January at their former price—4l. 10s. per ton. All our machinery and pitwork are in good order, and working well. We have had hard frost for the last week, and still continues, which has nearly suspended our surface operations.

CARN CAMBORNE.—W. Bishop, jun., Dec. 31: There is no change to notice in any part of the mine since last report.

CARN VIVIAN.—J. Polglase, W. Eustice, Jan. 2: The lode in the 53 fm. level end continues to improve for tin; it is now worth fully 40l. per fm. The 64 fm. level end will soon be under this tin ground. The stopes are producing the usual quantity of lead.

CENTRAL MINERA.—W. Davies, Jan. 2: The shaft sinking for the red vein has been sunk but little since last report; the men have been setting timber, which has caused a little delay in sinking; we commenced sinking again yesterday morning. I am sorry in not being able to report the communication of the great cross as yet; we have four men rising to meet the shaft, which we shall push on with all speed. The north-west end of the north lode is looking very promising, with stones of lead occasionally. We have suspended the re-timbering of the 55 yard level for the present, and the men are put to drive on the north lode.

CUDDRA.—Fras. Puckey, E. Dunstan, Jan. 2: The lode in the 100, west of Tickel's shaft, is at present disordered by some cross branches, which have injured the lode for the time, but we expect it will again shortly resume its former value. We have commenced taking down the lode in Walker's shaft, which is still looking well, worth fully 7 cwts. of tin per 100 sacks. There is no lode taken down in the winze sinking below the 60, west of Walker's shaft, since last reported. In the 60 west the tin part of the lode is 2 ft. wide, and will yield 2 cwts. of tin per 100 sacks. We are obliged to suspend the sinking of the winze below the 60, east of Walker's shaft, in consequence of the water being so quick. In No. 1 stope the lode is still 3 ft. wide, worth 2 cwts. of tin per 100 sacks. In No. 2 stope the lode is 6 ft. wide, worth 1 cwt. of tin per 100 sacks.

DEVON AND CORNWALL UNITED.—Thos. Neill, Dec. 31: The lode in the deep adit, east of shaft, is worth from 2 to 3 tons of ore per fm.—William and Mary: The lode in the 10, east of shaft, is worth 1 ton of ore per fm. We have no change to notice in any other part of the mine.

DULTA.—J. Martyn, Jan. 1: Since my last there has been a great improvement in Dyer's lode, which is improving every fathom we drive east. We have sunk 7 fms. on the new lode, and are driving on it to prove its size, which is 14 ft. In driving we have cut through a slide, and the lode is now producing some of the best work I have ever seen in the mine. We are driving on Dyer's lode, and shall intersect the new lode about 9 fms. further east. The new lode is underlying north, and is very close to the killas; it is the champion lode of Dulta, and will, I doubt not, very greatly increase the value of the mine. The dressing-floors are progressing well.

EAGLEBROOK.—H. Tyack, Jan. 1: We have driven the 30 fm. level about 6 feet east of the engine-shaft; here the part of the lode we are driving on is about 4 ft. wide, composed of spar, clay-slate, and decomposed porphyry. In driving the 30 west we have broken down some splendid stones of lead ore, and the vein altogether has a most promising appearance, and I have no doubt we shall soon enter into a good vein of orey ground here. In consequence of the severity of the weather we have not been able to keep the water out from these levels, and I have removed them to drive a cross-cut south at the 10, as we are by no means certain we have cut the south lode here, and by extending a short distance we shall make certain of this point. In the 20 west the lead for the last few days has not been quite so productive, having been disordered a little by a cross joint, but in a fathom or two more driving I expect it will resume its former productiveness.

EAST ABRAHAM.—H. Cowling, Jan. 1: The 45 fm. level is extended east on the main lode, about 150 fms., during which drivage for the first 100 fms. it has opened up good tribute ground, in the bottom of which the lode increases in value, containing rich grey and yellow copper ore, highly charged with the green carbonate. The engine-shaft is sunk 20 fms. below this level, which, upon being cleared, will enable us to open up a large quantity of ore ground; we are getting on with this work with all speed. The great cross-course of the district is running through our mine, at the intersection of which with the copper lodes, large deposits may be expected. This will also enable us to drive cross-cuts, and intersect the Wheal Abraham side lodes; also the main lode of Wheal Crenver, both of which have proved very productive. I have no hesitation in stating that we have a most valuable property in East Abraham, and one that cannot fail to be highly remunerative to the shareholders. The improved character of the lode between the eastern shaft in Wheal Abraham and the boundary, justifies the expectation of a continuous run of rich ore ground, the value of which far exceeds the average of the county. The returns from the old mine have exceeded two millions and a half sterling. It is therefore fair to infer a corresponding amount of profit will be realised from a judicious mode of working East Abraham, requiring but a small expenditure beyond the present amount to bring it into a dividend state.

EAST CARN BREA.—T. Glanville, J. Scholar, Jan. 1: In the 26, driving east, the lode is 2½ ft. wide, producing 2 tons of ore per fm. In the 26, driving east of the cross-cut, the south part of the south lode will produce 1½ ton of ore per fathom. In the 30, driving east from the western shaft, the lode is 2 feet wide, producing 3 tons of ore per fathom. In the 30, driving west from the western shaft, the lode will produce 1 ton of ore per fathom. In consequence of the increase of water we are not able to drive the 40 east from the western shaft.

EAST ROSEWARNE.—J. James, Dec. 28: The 55 east is much as last reported. In the 55 west the lode is 1 foot wide, orey throughout; the ground is still hard for driving; the stope over this level is worth 10l. per fm. In the 43 east the lode is 8 in. wide, containing a large portion of mundic, and a little copper ore; the stope below the 43 west is worth 22l. per fathom. The 43 cross-cut, south of King's, is without change to notice. We sampled on Tuesday last, computed, 82 tons of good quality ore.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Dec. 28: The 45, to drive both east and west of the shaft, by six men in each, the ends to be carried wide enough for a plat, at 10l. per fm. Next week we hope to be able to state its value. The 35, east of the shaft, by six men, at 9l. 10s. per fm., the lode being in two parts; the south one is 2 feet wide and the north one 20 inches, producing good work for tin and copper, worth full 10l. per fm. In the 35, west of shaft, a rise, to four men, at 5l. per fathom; lode 20 in. wide, yielding fully 1 ton of ore and some good tin per fm.—a very kindly lode, and likely to lay open some orey ground. The stope above the 35, to two men, at 2l. 5s. per fathom; lode worth from 5l. to 7l. per fm. The 25, east of the shaft, to four men, at 8l. per fm.; lode 20 in. wide, composed of gossan, quartz, &c., with stones of tin.
— January 1: The different operations are progressing satisfactorily, but we see no alteration calling for any remark since our advice of Saturday.

EAST WHEAL RUSSELL.—J. Richards, Dec. 27: Homersham's Shaft: At the 120 fm. level cross-cut north the south part of the lode has been met with, but not yet cut through; it is, so far as seen (a few inches) very promising, and yields some good stones of ore. In the 110 east the lode has become larger (4 ft. wide) and more promising, being composed of quartz, mundic, and good saving work for copper ore. In the 100 east the lode is also of good size (3 ft. wide), consisting of capel, mundic, peach, and a small proportion of copper ore. In the rise in back of the 100 fm. level end, and east of Davis's cross-cut, on the north part of the lode, the lode is unproductive. The lode in the stope in back of the 100 east, west of Oats's No. 2 winze, on the north part of the lode, is worth 10l. per fm. In the 66 east the lode is promising, and consists of capel, quartz, mundic, and rich stones of copper ore. In the 88, west of Hitchins's shaft, the lode is again showing strong indications of something good being near; the part being carried is composed of an abundance of mundic, prian, quartz, and rich stones of grey ore.
— John Goldsworthy, Jan. 2: I beg to inform you that in Homersham's shaft the water is in fork to the bottom of the 120 fm. level; the south lode, referred to in former reports, is 1½ ft. wide, composed of capel, iron, quartz, mundic, with rich stones of grey and native copper ore, not sufficient of the latter to value; it is a promising looking lode. In the 110 fm. level east, the lode is 4 ft. wide, composed of peach, quartz, &c., producing saving work. In the 100 fm. level east, the lode is 3 to 4 ft. wide, composed of mundic, quartz, &c., spotted with black oxide of copper ore—a kindly lode. In the rise in the back of the 100 fm. level, on the north part of the lode, east of Davis's cross-cut, the lode is 2 ft. wide—poor. In the stope in the back of the 100 fm. level, west of Oats's No. 2 winze, is worth 10l. per fm. In the 88 fm. level east, the lode is 2 ft. wide, composed of capel, quartz, &c. In the 88 fm. level, west of Hitchin's engine-shaft, the lode continues to show a kindly appearance. In the 66 fm. level east the lode presents a kindly appearance.

FRANK MILLS.—J. P. Nicholls, J. Cornish, Jan. 1: The 84 north has been productive since our last to the amount of ½ ton of lead ore per fm. Venton's stope, in back of this level, has been worked through to the 72, since which we have opened another stope to the south, which is yielding fully ½ ton of lead ore per fm. In the 72 north the lode is still large, and yielding occasional stones of lead ore, looking promising for improvement. The 60 north, on the west branch, is just the same as we last reported it. The stopes in back of the 60 and 45 fm. levels are yielding about the same quantity of ore as they have been for some time past. There is no change in any other part of the mine worthy of remark. We sampled on Friday last 115 tons of good quality silver-lead ore.

FURSDON.—J. Collins, Jan. 1: The stopes working by two men in the bottom of the adit level are yielding ore of good quality, sufficient to pay for working. The stopes in the back of the 11 east, working by eight men, are yielding 2¼ tons of ore per fathom, worth from 6l. to 7l. per ton. The winze sinking under the 11 east is improving; it appears we have the top of another shoot of ore. The 21 east is still in promising ground, with good spots of ore. The lode in the winze is looking promising going down; at the point where we expect to cut it at this level we look for a good lode. We sampled for December month 39 tons of ore.

GAWTON.—George Rowe, Dec. 28: The lode in the 36 west is without change, being large and orey—in fact, we have not yet seen the south wall, consequently cannot ascertain its size; the water is still flowing from this point exceedingly strong and in quantity—nearly 70 gallons per minute. We, therefore, purpose to drive this end a short distance on the north flookan part of the lode, in order to drain the water, which will facilitate our operations in cutting through and taking down the ore-bearing portion, it being at present very wet, and slow of progress. The lode in the stopes in back of this level is also large, and yielding its usual quantity of ore. We have not yet been in a position to work on the lode in the back of the 50, were it is worth 30l. per fathom, in consequence of the tributers' ore not being removed, which we expect to do in a few days. During the past week we have had a breakage of the connecting links in the large chain, which disconnected all our bottom pitwork, and caused the water to rise several feet: consequently, our progress is impeded in drawing the tributers' ore to surface in sufficient time for the sampling on Tuesday next, but hope to be in time for the Monday following.

GREAT BRIGAN.—T. Trelease, December 28: In the past week we have dropped our 17-in. shaft 9 fms. 3 ft. below the adit level, and put our new 70-in. pumping-engine to work, and have drained the water so deep as the drop-lift is put down, and find the coming water at this depth about three strokes per minute. We have commenced to rid the shaft, and hope to go on forking with good speed, as everything with regard to the pitwork and engine is in good working order. No change to notice in any of our operations in the north part of the mine since our last report.

GREAT DARREN.—A. Francis, Dec. 31: We have put the pumping-wheel to work, and have forked the water 5 fathoms below Oliver's adit, and should the weather not prove very severe, I hope we shall be in fork in about one week from this date, when we shall immediately commence sinking our engine-shaft in a splendid and rich course of silver-lead ore, and have a great deal of ground to take away at a low tribute. The machinery for driving the two crushing-mills is being proceeded with as fast as possible, and in a few days we shall get them to work; we have ore stuff enough ready to keep them both constantly going. The preparations for carrying on the stope in Francis's level are going on, and this bargain will be pressed forward with the utmost vigour. The tribute pitches, at which we have now 20 men, are looking well, and the men doing their utmost. Tank's cross-cut has been extended 33 fms. from the shaft, but I am not certain that it has yet met with the principal lode. Under Isaac Thomas's farm-house there has been very extensive workings, and I am certain we shall meet with a great course of ore here when circumstances will permit our driving under it. We are trying Cwmsymlog lode at surface, which cannot fail becoming productive and profitable in depth. It will require a great deal of time and attention to develope this great mine properly, but rest assured that every exertion in my power shall be used to bring the mine into a quick state of profits, of which, from our present prospects, there is a moral certainty.

GREAT NORTH DOWNS.—T. Trelease, Dec. 28: The water is now drained 10 fms. below the adit level; we still find it very powerful, but having put the Brigan engine to work it will so assist us that we hope to drain the mine at a more rapid rate. There is not a 10 fm. level at the engine-shaft, but there is at some of the shafts in the mine, which have been cleared so as to examine them, to ascertain if there is any water coming down from the adit level.

GREAT RETALLACK.—W. H. Reynolds, Dec. 31: In the shaft the part of the lode carried is made up of flookan, spar, mundic, and spots of lead, and is altogether a kindly lode. The lode in the 45 east is soft, and yielding dredgy stones of lead, and looks kindly to improve. No other change to notice.

GREAT SOUTH TOLGUS.—J. Daw, Jan. 1: The lode in the 125 west is 1 ft. wide, producing occasional stones of ore. The lode in the 112 west is 2 ft. wide, producing a little ore, and it is letting out much water. The south branch at the 50 is 1 ft. wide, producing 1 ton of ore per fm. The lode in the 40 west is 2 ft. wide, producing stones of ore.

GREAT TREVEDDOE.—J. Polyglase, Dec. 31: We got through the bottom level last night—large workings. We found the wood pump and the rope that the old men used were left in the tackle. Evidently the old story so often repeated respecting this place is correct—that is, they did not intend to stop. The lode in the eastern end of the shaft is standing untouched, and a splendid lode it is for tin and copper. The old men were deeper than we are now, but their pump is to the bottom. We shall this morning commence to clear the old shaft; this will not take long, being forked to the bottom by means of the old pump. The lode going west is driven on, or rather by, for the old men have not taken it down; it is good work for tin, and a large strong lode.

GREAT TYWARNHAILE.—J. Hampton, J. Daw, T. Hampton, Jan. 1: We are progressing as fast as possible with the erection of Johns's engine, and no time shall be lost in getting it to work, as soon after that we shall be to the bottom of the mine and in full operation throughout. Some of the pitches have improved, especially those near Johns's shaft, and we have set them at a less tribute than hitherto. We expect the next sampling will be fully 300 tons.

GREAT WHEAL ALFRED.—William Bugelhole, John Delbridge, Jan. 1: Copper House Shaft: The lode in No. 1 stope, in back of the 220 fm. level, is worth 16l. per fm. The lode in No. 1 stope, in bottom of the 210 west, is worth 15l. per fm.; No. 2 is worth 10l. per fm. The lode in No. 1 stope, in back of this level, is worth 13l. per fm.; No. 2 is worth 18l. per fm.; No. 3 is worth 28l. per fm.; No. 4 is worth 10l. per fm.; No. 5 is worth 12l. per fm. The lode in the end east on the branch is worth 12l. per fm. There is no change in the 160 cross-cut since our last report.

GREAT WHEAL BUSY.—J. Delbridge, J. Petherick, E. Richards, Dec. 28: In the present week the water has been in at the bottom of the mine. In the 120, east of Offord's, the lode is 3 ft. wide, producing stones of ore. In the 110 ditto the lode is 5 ft. wide—good for ore, worth 1 ton. In the 100 ditto the lode is from 6 to 8 ft. wide, fine for ore. In the 90, east of Mathew's, the lode is 6 ft. wide, not yielding so much tin—looking better for ore. In the 70 the lode is 6 ft. wide, low price tinstuff. In the 50 the lode is 3 ft. wide, low price tinstuff. In the 100 west the lode is 4 ft. wide, poor. In the 90 west the lode is 3 ft. wide—a little tin. In the 80 cross-cut, under Key's, no change to notice. In the 70 cross-cut north no change. Our stopes in the 100 are yielding the usual quantity. Warly's winze is yielding 18 tons; Levitt's winze, 18 tons; Kitelee's winze, 18 tons. At Mathew's shaft the lode is disordered by a floor of killas, which we are of opinion we shall soon pass through; the lode is worth 10 tons per fm. Other things much as usual. We have the new boiler at work at Harvey's engine, and the boiler-house roof and building almost completed.

GREAT WHEAL FORTUNE.—J. Vivian, J. Hoskin, N. S. Miners, T. George, Jan. 2: The following bargains were set on Saturday last, it being our monthly setting:—To rise in the back of the 85, on old lode, by six men, at 10l. per fathom, for the month. The 50 to drive west of Blue Barrow shaft, on north lode, by four men, at 4l. 10s. per fathom for the month. The 50 to drive east of Blue Burrow, on north lode, by two men, at 5l. per fathom, for the month. The 60 to drive east of Blue Burrow shaft, on north lode, by four men, at 1l. 10s. per fathom, and 10s. tribute, for the month. The 40 fathom level to drive east on Conquer branches by two men, at 1l. per fathom, and 12s. 4d. tribute, for the month. Copper ore shaft to cut down and timber and render complete for drawing to the 20, by six men; bargain taken at 20l. A cross-cut to drive north in the 78, to cut Carnmeal lode, by eight men, 1 fm., or cut the lode. The 68 to drive east of Painter's, on Carnmeal lode, by four men, at 5l. per fathom, for the month. To stope in the back of this level, east of end of ground, by four men, at 3l. 5s. per fathom. To stope in the back, west of end of ground, by four men, at 3l. 5s. per fathom, for the month. Hoskins's flat-rod shaft to sink to complete the lift by eight men, at 17l. per fm. The 68 to drive west of Hoskin's, on Carnmeal lode, by four men, at 4l. 10s. per fathom, for the month. To stope in the back of this level, from end of ground, by six men, at 3l. 12s. 6d., for the month. The 68 to drive east of Hosking's, on Carnmeal lode, by two men, at 10l. per fm., 1 fm., or the month. The 58 to drive east of Hosking's on Carnmal lode, by four men, at 4l. 5s. per fathom, for the month. To stope in the back of this level, east of James's winze, by four men, at 3l. per fathom, for the month. To stope west of the winze by four men, at 2l. 12s. 6d. per fathom. To stope east of end of ground by four men, at 3l. 15s. per fathom. The 26 fathom level to drive west of Crotches, on Carnmeal lode, by two men, at 4l. 5s. per fathom. All the smith work of the mine for three months, taken at 20l. per month. We have also set 48 pitches at an average tribute of 9s. 10d. in 1l. The ends, stopes, and pitches continue to yield about their usual quantities of tin.

GREAT WHEAL MARTHA.—H. Rickard, Jan. 2: The ground in the 52 cross-cut, towards the lode, is very congenial for the production of copper ore, and the end is getting very wet which indicates we are getting near the lode. The stopes are much as usual in the back of the 40, east from shaft. Thomas's shaft is very near being down to the 40, but the end is not quite home to it. The lode in the 20, west from Thomas's shaft, is a good orey lode, worth 10l. per fm. The tribute pitches are much the same. We have on the quay about 130 tons ready for sampling on Monday next, and about 120 tons on the mine ready for crushing, which we are prevented from doing, owing to breaking the fly-wheel shaft belonging to crusher; this I hope will be replaced by a new one in a day or two.

HAWKMOOR.—J. Richards, Dec. 31: The lode in the stopes in back of the 25, east of Rowe's rise, is worth 1½ ton of ore per fm. In the 50 west but little has been done; the men have been engaged rising in back thereof. In Job's rise, in back of the 50 west, we are going up by the side of the lode for more speedy proof of same. We are preparing the 30 to receive railroad, &c., previous to commencing driving.—West Hawkmoor: In the adit west the No. 2 lode is small, but of a very promising character.

HERWARD UNITED.—Jan. 2: Page's shaft, in the common, is the same as when last reported on. Page's vein, No. 1, continues the same as usual, being from 6 to 8 in. wide, composed of spar and lead ore.—Ward's Shaft: The main vein is very promising at the bottom of this shaft, and we shall commence sinking the shaft on the vein in a few days, which will prove the ground in the east end. All other parts are in the same state as usual.

HOLMBUSH.—Dec. 30: In the 175, east of shaft, the lode is worth 20l. per fathom. The winze sinking below the 160, west of the lead lode, is looking very well; the lode is worth 50l. per fm. We have holed to-day the rise in the back of the 145 to the 132, on the lead lode, which has opened up good tribute ground. The rise in back of the 20, on Flap-jack lode, is looking a little better; the lode is worth 3½ tons per fathom. All other places are much the same as when last reported. We shall sample 3 10 tons of good quality copper ore.

KELLY BRAY.—S. James, Dec. 28: The lode in the 75 east is 3½ ft. wide, worth 12l. per fm. The lode in the pitch in back of the same level is worth 20l. per fathom. We have dressed and ready for sampling about 24 tons of fair quality copper ore, which has been broken from the above-named pitch in the past taking. The lode in the 35 east is 2 ft. wide, composed of blende, mundic, and stones of ore. There is no change to notice of importance in the tribute department in the past week.—Eastern Mine: The lode in the 70 east is 2 ft. wide, consisting of quartz, blende, mundic, and rich stones of ore, and there is every reason to expect a speedy improvement, as the branches which were met with in the cross-cut driving north towards the lode are fast dipping north, and falling into the lode, which causes the ground in the end to be very strongly mineralised; a more kindly end for the production of copper ore is scarcely to be met with. The lode in the 60 east appears to be in a disordered state at present; whether it is from the influence of the elvan course, or a cross-course ahead, we are not in a position to say, but there are often patches of elvan met with in the end, carrying spots of lead. We have ready for sampling on Tuesday, the 31st inst., about 146 tons of ore, which we are of opinion will be of a higher produce than it hitherto has been.

LADY BERTHA.—Capts. Harpur and Metherell, Dec. 28: To-day is our pay and setting, particulars of which will be sent you. We have no particular change to notice in either of the bottom levels. The lode in the 41 fm. level east is large, composed of quartz, mundic, and stones of ore. The stopes in the back of the 41 west are worth 9l. per fm. In the 30 east the lode is increasing in size, composed of peach, mundic, and ore, worth 12l. per fm., and likely, from present appearances, for further improvement shortly. The winze sinking below this level is down nearly 9 fms.; the lode is about 3 ft. wide, composed of capel, mundic, and peach, with occasional stones of ore. In the 10 east no lode has been taken down since our last report. The different tribute pitches are producing much the same as usual. We hope to sample on Tuesday about 160 tons.
— Capts. Harpur and Metherell, Jan. 2: We have just been through the mine. The different ends, winzes, stopes, and pitches present much the same appearance and character as when we last reported. We propose suspending for the present operations in the 53 east, and place the men now employed in this end in the new shaft, which will be commenced immediately the dialing of the ground is completed.

LLANERCH-Y-BAIDD.—B. J. Edwards, Dec. 27: The engine is working well, both for pumping and winding. The water is rapidly sinking in the shaft, and we expect will be forked in a few days. We shall continue the sinking of the shaft for a few yards, in order to drain every part of the mine, and enable us to work the deeper parts, where ore has been already discovered. It is the opinion of those well acquainted with this mine that with our present means of overcoming the water we cannot fail to have a good mine, and shall soon be making profitable returns of ore.

LONG RAKE.—Jan. 1: The lode in the 48 east is in rather broken ground, soft, and producing stones of lead occasionally. The stopes behind the forebreast are producing dressing stuff of coarse quality. The winze sinking below the 48 east is in a large regular lode, producing full 1½ ton per fm. The 60 east is in a lode 2 ft. wide, producing dressing work; we expect the end to improve in value by next report. The 60 west is without change. We think to sample next week about 15 tons, or perhaps more.

LOWER PARK.—W. Davies, Jan. 2: The shaftmen have completed putting in the pentice, and making all necessary preparations for sinking; we commenced sinking this morning. The 40 yard level, driving west, is hard for driving, and unproductive for lead at present. The rise in the back of the 40 east is producing good stones of lead occasionally, but not enough to value. The office shaft is going down as fast as possible.

MINERAL COURT.—J. Martyn, Jan. 1: The tributers are working with spirit, and getting good wages at 12s. in 1l., they paying all costs; they have taken for six months. Our four carpenters are very busy in erecting the eight heads of stamps; and, should the weather prove favourable, I hope to get them to work in three weeks from this time.

MOLLAND.—T. Bennetts: The lode in the engine-shaft, sinking below the 52 fm. level, is not so wide as last week, though a kindly looking lode, producing good stones of ore; ground a little easier for sinking than last month; let to six men, 1 fm. at 17l. The stopes in back of the 42 east are producing 1½ ton of ore per fm.; here we have now six men stoping, at 3l. 10s. per fm. The stopes in back of the 32 east are worth 1 ton of ore per fm. The branch gone off in the side here is producing 1 ton of good ore per fm.; six men are engaged here, driving on the said branch, and stoping away the ore; let 2 fms., at 2l. 15s. per fm. The last of our parcel of ore was taken to Barnstaple on Monday, and we made an attempt to divide it on that day, but found it impossible to do so, the ore being so hard, in consequence of the severe frost.

NANT-Y-IAGO.—The 10 west has been driven through a portion of the cross-course, but several branches of lead still continue in the forebreast; this, we hope, will lead into the lode on the opposite side; if so, I have no doubt but that we shall find it productive for lead ore, which would be of great importance, as it would be in high and virgin ground. The piece of ground standing between this and the middle level we are not yet stoping, but shall do so as soon as convenient. The stope above the middle level is just the same in appearance as for some time past. No lode has been taken down for the last eight or nine days. We have a piece desued which we shall begin to cut down to-day: I should say it will produce full 2 tons of ore. Everything is going on well, with the exception of the dressing, which has been greatly retarded by heavy rains and frost. We hope to commence carting a parcel of lead ore to Llanidloes next week.

NEW CROW HILL.—The ground in the shaft is very favourable. The side on which the lode lies we are obliged to timber, and plenty of water, both of which are good indications. The lode in back of the 55, and in bottom of the 35 east, is looking well.

NEW TRELEIGH.—F. Pryor: Our pay and setting went off very well; set the 90 fathom level to drive east of Carr's shaft, in which there is a good branch of ore. Cross-cut at the 80 to see the new lode. Cross-cut at the 70 to cut other south lodes The 80 fm. level is split in two parts; from the course of ore gone down in the 70, we ought very soon to reach it, and, in doing so, we may reasonably expect a change.

NEW WHEAL VADDON.—P. Floyd, Dec. 31: In the 12, driving east of Milldrum's shaft, the lode is 3 ft. wide, worth 10l. per fm. for tin. We have during the past week been taking down the lode, and it will take three or four days more to complete it, when we shall commence to drive the end east on the course of the lode. In the 12, driving west, the lode is 2 ft. wide, worth 3l. 10s. per fathom, and of a most promising appearance. By extending this end about 5 or 6 fms. further west it will intersect the caunter lode, when we expect a change for the better. The stopes in back of the 12 fathom level are producing average work for sampling. We shall sink Milldrum's shaft as soon as we get the whim completed, which will be in a short time. Our tribute pitches are looking favourable. On Dec. 13 we sold 72l. 5s. 6d. worth of tinstone. Our next sampling will be on Saturday, Jan. 4.

NORTH BULLER.—J. B. Delbridge, Dec. 28: The 78 cross-cut north is without change to notice since the last report; set to drive by six men, at 7l. 7s. per fathom. King's flat-rod shaft is sunk 1 ft. 6 in. below the 55; in the coming week we shall draw with the kibble from that level, and commence to sink with all speed to the 78, of which we have 13 fms. to sink; the engine and pitwork are working well.

NORTH DOWNS.—Jan. 1: In the 60, east of King's shaft, we have this day met with a thorough change, the same being very soft, and similar to that which we had in the 50, before we had the course of ore; this we regard as a very favourable indication. In the 60 west the lode is now 2½ ft. wide, producing fine stones of ore; 15 fms. in advance of this end we are sinking a winze down 7 feet below the 50; the lode worth fully 20l. per fm., and quite dry. In the 50 east we have a little improvement, but not to value. In the 40, east of Bennett's, the lode is worth 5l. per fm. The 50, west of King's, is worth 10l. per fm. All other places much the same as last reported.

NORTH GREAT WORK.—J. Pope, jun., Dec. 31: The 10 fm. level appears to be getting into settled ground, and finding the water to be issuing very strongly from the north side I cut into it about 1 ft., and discovered the lode, from which I took some good work for tin. I hope to give you some further information respecting it in course of two or three days.

NORTH HALLENBEAGLE.—J. Crase, Jan. 1: Bingley's engine-shaft is sunk 7 ft. below the 18; the ground is still rather hard, with a branch of ore 3 in. wide in the south part of the lode. The 18 west has improved; the cross-branch of quartz having left the lode it has resumed its former appearance, worth 1 ton of ore per fathom, or 12l. The stope in the back of this end has also improved, having been for the last month disordered by the same cross-branch of quartz, is now producing 1 ton of good quality ore per fm. The lode in the eastern end is 18 in. wide, a very strong looking lode, but nothing to value. The lode in the 10 west is at present unproductive. We have not yet reached the cross-cut level to the White Works lode at the deep adit level in the western sett. The lode at Barbery is producing good stones of ore. We have never seen richer ore from the 18 in this district; it is now evident that we are upon a good run of ore ground.

NORTH JANE.—S. Sims, Jan. 1: The last three weeks we have been engaged fixing horizontal rods from our engine on to Kerr's shaft in a straight line; we have cut down this shaft from the surface to the deep adit level, in order to make it available for drawing as well as for the rods to work; we have also fixed the balance-bob, capstan, shears, horse-whim, &c., and 30 fms. of connection rods in this shaft, also 11 fms. of 8-in. drawing-lift; put in footway and divided the shaft from the surface to the deep adit level, which is quite sufficient till we sink 10 or 15 fms. deeper. We have also put a chain to work from Kerr's shaft on to the gossan shaft, and fixed a travelling bob about midway, to break a small turn, which is answering exceedingly well; this is the only angle we have from the engine on to the gossan-shaft, which is upwards of 300 fathoms. Since we have fixed these rods in straight line the engine is working much better, and not burning so much coal as before by nearly a quarter part, which is about 6 tons per month. Our pitches and bargains are looking just the same as when last reported on. We shall have about 2 tons of tin fit for sale by Saturday next. A full report next week.

NORTH LAXEY.—R. Rowe, Dec. 28: I have been at North Laxey to-day. The new engine-shaft is down 11 fms. 3 ft. below the 27; the lode is about 2 ft. wide, and as it now is it will yield 1 ton of lead per fm. Taking all things into account, the improved value of the lode in bottom of the shaft, and the desirability of having ample room for a fork or dip for the new level, I determined to-day to sink the shaft 9 ft. deeper; the advantage will be felt every way, none more so than by the increased hold on the ore ground, which in the 27 fm. level bottom is proved for nearly 30 fms. long. There is no change yet in the 27 fm. level end, driving south; this now being a pioneer level, a discovery would be invaluable, mainly from the mountain before it rising so precipitously.

NORTH MINERA.—T. P. Thomas, W. T. Harris: The eastern shaft is now down 16 fathoms; the lode is well defined, producing good lead, and looking very promising. The 40 yard level, driving east, at Pugh's, is progressing as fast as the tightness of the ground will admit; the lode is a very strong one, with well-defined and smooth wall, perpendicular, and will produce 3 to 4 tons of rich ore per fathom. On the caunter lode, driving south, the leader of ore is not so wide as it was, but will produce now from 2 to 3 tons of solid ore per fathom. The level driving north, on this lode, will produce about 1½ to 2 tons of lead ore per fathom. The level driving south, on the flat, east of engine-shaft, is producing about 1 to 1½ ton per fm.—Wilson's Shaft: The level driving north is looking very encouraging, producing about 2 tons of ore per fm. In continuing this level north, we shall soon be where Michael's lode forms a junction with the one we are driving on, and where we expect something important. This week we sold 20 tons of ore to Messrs. Walker, Parker, and Co., at 11l. 16s. per ton. From this report you will see we are only driving and sinking, as, with hard frosts and short days, it is not advisable to stope what we are prevented from dressing.

NORTH WHEAL ROBERT.—J. Richards, Dec. 27: Murchison's Shaft: In Elliott's cross-cut south at the 52 west, the ground is hard, and the progress consequently slow. In the 42 west, east of Crowle's winze, on No. 1 south lode, the lode is 3 ft. wide, and worth ½ ton of ore per fm. In the 30, east of Edward's cross-cut, on No. 2 south lode, the lode is 3 ft. wide, consisting of capel, mundic, quartz, and good stones of ore. In Edward's cross-cut south at the 30, to the east of the cross-course, No. 2 south lode is intersected; it is 3 ft. wide, and being composed of quartz, capel, mundic, prian, and ore, is promising. In the 20, east of Davis's rise, the lode is worth 2 tons of ore per fm. In the 20, east of Toll's cross-cut, on the north part of the lode, the lode is 18 in. wide, and worth 1 ton of ore per fm. In the 20, west of Toll's cross-cut, on the north part of the lode, the lode is 1 ft. wide, and worth 1 ton of ore per fm. The lode in the stopes in back of the 20, west of Toll's cross-cut, on the south part of the lode, is worth 2 tons of rich ore per fathom.—Trial Shaft: In the 42 west, and west of Stancombe's cross-cut, on the south part of the main lode, the lode is worth 1 ton of ore per fm., and is otherwise promising. In Bolt's cross-cut south, at the 30 west, the ground is not so favourable for progress; the water is, however, increasing, indicating the lode being near. The lode in the rise and stope in back of the 30 is yielding some good tutwork.
— Wm. Godden, Jan. 1: I beg to inform you that we have communicated the 42 end, west of Scobbel's cross-cut, on the south part of the lode, to the boundary rise at Sortridge Consols Mines, where we have a good piece of ore ground laid open. We weighed the last ore sampled on Monday last, which was over the computed weight—1 ton 16 cwts. 2 qrs., about 22l. 10s. worth of ore over.

NORTH WREY.—T. Kemp, Jan. 2: During the past week we have had to suspend operations in the rise above the back of the cross-cut from the 38 (going up to meet the new shaft) in consequence of the stoppage of the wheel from frost. The rise is up 3 fms. above the back of the cross-cut, leaving only 4 fms. 3 ft. between it and the bottom of new shaft. As soon as the weather sets in favourable for surface operations, I think it will be advisable that the steam-engine should be erected, which will place us beyond these untoward chances, for our water-power is very fluctuating.

OLD TOLGUS.—W. Gilbert, Jan. 1: The south lode, in the 52 west, is 1½ ft. wide, composed of spar, copper ore, mundic, and blende—improving, and letting out more water. The 42 west, on the south lode, is still split into parts, each part containing mineral, and promises to early improve. The 32 west, on the same lode, is 2 ft. wide, worth for blende 4 tons per fm., producing good stones of copper ore, and some branches of mineral in the country inclining towards the lode, which is a favourable indication.

PEDN-AN-DREA UNITED.—Wm. Tregay, Thomas Delbridge, Dec. 28: The past week having been a very broken one, by the Christmas holidays, we have taken advantage of this, and of the abatement of the surface water, to do the work of fixing rods at the engine-shaft, to forward as much as possible the sinking of the sump. The fixing these rods necessarily causing much stopping of the engine, would at any other time have been a serious hindrance, but having been done this week has caused very little more hindrance than would otherwise have occurred. We hope to finish the rods this afternoon, and get the water out of the bottom level by Monday morning, when no time will be lost in pushing the 110 end through to the winze in the 100. The lode in the 100 east is poor; 100 west is worth 9l. per fm.; 90 west is poor; 90, new rise, is poor; 90 west, on Skimmer's lode, is worth 8l. per fm. In the stope in bottom of the 80 west the men have not yet got forth to the tin ground; we expect to see more of it next week. —Street and Bragg's: In the 47 east the lode is poor. In the 40 east the lode is still unsettled, producing coarse tinstuff. Our stamping machinery has been working well throughout the week.

PENHALLS.—R. Pryor, sen., J. Gribble, Dec. 28: The lode at the engine-shaft, sinking below the 30, is 2 ft. wide, producing good stones of tin. In the 30 east the lode is 18 in. wide, worth full 11l. per fm., and, judging from its present appearance, we think a still further improvement may be shortly expected. The lode in the stopes between the 30 west and the old men's workings is 8 in. wide, producing good stamping work for tin. In the 20 east the lode is 2 ft. wide, composed of peach, mundic, and spar, with good stones of tin. In the 10 east the lode is 1 ft. wide, producing good stones of tin, but is not yet out of the influence of the slide. The lode in the winze sinking below this level is 2 ft. wide, worth 6l. per fm.; we have about 2 fms. more to sink to hole to the 20, which, when done, will open up a good piece of tribute ground. We consider the bottom part of the mine to be more cheering to-day than we have even seen it before, and believe we shall be able to report more favourably on the same in a short time.

POLGEAR.—W. H. Pascoe, Jan. 2: The 30 is driven 9 fms. east of engine-shaft; during this driving the lode has varied in size from 2½ to 4 ft. in width, of a very pro-

mising appearance, made up of elvan, black and yellow copper ore, mundic, and occasional spots of lead. In the present end the lode is 4 ft. wide, with two well-defined walls, and letting out a quantity of water. We have cut no lode in the 30 cross-cut north; the ground seems a little better for driving. The engine works remarkably well, and when the boiler-house roof is completed we calculate burning about 4 cwts. of coals in 24 hours, this being sufficient to keep our water-power; it will greatly lessen our monthly expenditure.

PROSPER UNITED.—W. H. Martin, W. Millett, Jan. 2: Hosking's engine-shaft is cut down to within 3 feet of the 40. The ground in Louisa's engine-shaft, sinking below the 40, continues favourable, and is being sunk by 12 men, with all dispatch. The cross-cut in the 40, to intersect the lode north of the elvans, is extended 3 fathoms, the ground is easy for exploring, and let at 45s. per fm. Ladder-road shaft is sunk nearly as deep as the 40, and when communicated with that level, we shall at once commence to drive west on the lode. In the 30, west of ladder-road shaft, the south part of the lode, which is being driven on, has during the last few days been subject to bunches of capel and elvans, but at present it is composed of soft spar and gossan, black, grey, and yellow copper ore of good quality, and will yield at least 4 tons per fm.; the north part of the lode, which is the tin course, is still standing. The rise in the back of the 30 is communicated with the 20; in this rise the lode has been worth on an average full 35l. per fm. The lode in the 30, west of Henry's shaft, is 3½ feet wide, worth 20l. per fm. All the other points of operation are without any material change.

REDMOOR.—T. Taylor, Dec. 31: We have not taken down any lode during the past week; the ground in the winzes and rises is just as last report. No change worthy of notice in the tribute ground.

RHEIDOL.—Capt. Ridge, Dec. 28: Rhurruggus Engine-shaft: In the 12, on Gwaithcoch lode, driving east, the lode is the whole width of the level, composed of flookan, spar, and sulphur. On Monday last we removed four of the men from this level to resume the driving of the Rhurruggus deep adit level south, which is on the south branch of the lode; I am happy to inform you this end has a very kindly appearance; the lode is 1 ft. wide, composed of spar and spots of lead; if this end improves in the incoming week as much as this week, I should propose to put six men in place of four. In Rhurruggus deep adit level the lode is from 4 to 5 ft. wide, mixed throughout with blende, yielding upwards of 2 tons per fm., and stones of lead occasionally.

ROSEWARNE CONSOLS.—J. Berryman, Jan. 2: There is no change to notice in any of the tutwork bargains or tribute pitches since last report. The 30 fm. level end, east of Ellen's shaft, is gradually improving, and the lode becoming larger. The ground in the 40 is rather harder, and we think we are approaching the ore ground.

ROSEWARNE UNITED.—E. Carthew, Jan. 2: In the 90, west of footway shaft, the lode is 2 feet wide, producing a little ore. In the 90, east of Jennings's shaft, the lode is 2½ feet, yielding good stones of copper ore. In the 80, west of footway shaft, the lode is 2 feet wide, unproductive. In the 80, east of Jennings's shaft, the lode is 3 feet wide, producing good stones of ore. In the 74, west of Richards's shaft, the lode is 2 feet wide, producing a little ore, and looks more promising. In the 58, west of Richards's shaft, we have driven 3 feet through the lode; it contains good work for tin, and stones of copper ore, and have not seen the north wall. In the 46, east of Lane's shaft, we are driving to cut the north part. The 34, west of Richard's shaft, is driving through the lode. In the 34, east of Wellington's shaft, the lode is 3 feet wide, and containing a little ore. In the 34, on copper bottom north lode, the lode is 2 feet wide, producing stones of copper ore, mundic, and lead.

SCHULL BAY.—W. Thomas, Dec. 28: The engine-shaft is sunk 2 fms. 2 ft. 11 in. below the 16, the shaftmen having taken a lump contract to sink 10 fms., 12 ft. by 6 ft., for 150l.; we have a large promising lode, which improves in sinking, as the shaft has passed through a hard and unproductive part of the lode, which appears to have formed between two great deposits of ore. The sump-winze, No. 8 in section, is sunk 4 ft. below the 16; this winze has also been set a lump bargain to sink 10 fms. for 80l., and it appears to be entering a lode of the same favourable character as in the engine-shaft. No. 3 whim shaft is sunk 5 fms. 1 ft. 10 in. below the 8, and set to six men, at 15l. 15s., lump bargain, to sink to the 16; this shaft is being sunk in the killas, by the side of the lode, which will be cut through when we reach the 16, as by so doing it will prove the lode and form a plat; we are completing this shaft as fast as possible from the deep adit to surface, and also getting the whim ready to erect on the shaft. We have taken the lift, ladders, &c., out of No. 4 winze, and set a stope east of winze, 8 fm. level, to four men, at 3l. 15s. per fm. The stope east of No. 5 winze, to four men, at 4l. 15s. per fathom. A stope, Thomas's lode, to two men, at 3l. 10s. per fm. I believe the stopes during the past month will have produced ore equal to the estimate, and that for the ensuing month they will produce a fair quantity of ore; particulars, however, of quantity and quality shall be forwarded in due course.

SCORRIER CONSOLS.—J. Daniel, Jan. 1: Painter's engine-shaft is sunk 8 fms. 1 ft. under the 30; the ground continues favourable; price for sinking, 10l. per fm. The cross-cut north, in the 30, is extended 8 fms. from Painter's engine-shaft. No. 4 lode is expected to be cut in driving this level about 7 fms. further; driving at 40s. per fm. The cross-cut south, in this level, is driven from same shaft 20 fms., as yet nothing of importance has been met with; the ground is still easy; price 45s. per fathom. The 17 cross-cut, south of new shaft, is extended 14 fms., and, according to the underlie of No. 1 lode, expect to intersect it in about 2 fms. further driving, being driven at 70s. per fathom. We are pushing the cross-cuts with all speed, as until the lodes are intersected nothing will be known as to the value of the mine. In clearing the adit level west, on the course of the lode, noticed in last report, it is found to be continued south, and is now clear to within 12 fms. of Highburrow shaft. There are three lodes seen south of the one referred to, each about 1 ft. wide. No levels have been driven on their course, therefore cannot say much about their character. It is desirable to get to Highburrow as soon as possible, as the old workers are represented to have done a great deal of work about this shaft.

SIGFORD CONSOLS.—Wm. Hosking, Jan. 1: The parties working Smith's Wood Mine, immediately to the west of our sett, are driving on their No. 1 tin lode towards us, and are now within a few feet of our boundary. They are driving out to get an exit for their water, but at the same time they are proving the lode for us. Their present end is very rich. This is a most important feature for Sigford, and adds greatly to the value of the property. The ground in the 24, going west of engine-shaft, is still easier for driving. The end is being driven by six men, at 8l. per fm. When first we commenced driving this level the cost was 17l. per fm. The lode here is 3 ft. wide, producing good work for copper. The engine continues to work satisfactorily.

SMITH'S WOOD.—W. Hosking, Jan. 1: The driving of the adit level, on No. 1 lode, towards Sigford Mine, goes on most favourably; the lode in the present end is producing rich work for tin throughout. Having met with an increase of water in driving the 11 fm. level west of shaft, on No. 2 lode, we are compelled to suspend the driving for the moment, but I have placed the men to stope the back of the level, where they are breaking splendid work for tin. I estimate the lode here to be worth 30l. per fm.; the cost of stoping is 30s. per fm. The 20 heads of stamps are in full work, and turning out tinstuff of good quality. I am pressing on the work that the calcining-house may be erected in as short a time as possible. When this is completed we shall be able to place a good parcel of tin in the market. The further laying out of the dressing-floors, together with all other surface works, are being vigorously pushed forward.

SORTRIDGE CONSOLS.—R. Jackson, Jan. 2: In the 40, west of Williams' rise, on the north part of the main lode, the lode is 2 ft. wide, worth 2 tons of ore per fm. In Williams' rise, in the back of the 40, west of the engine-shaft, on the north part of the main lode, the lode is 2 ft. wide, worth 1 ton of ore per fm. In Jenkins's rise, in the back of the 40, east of the eastern shaft, the lode is 1½ ft. wide, yielding some good saving work. In the 50, driving east of Crew's cross-cut, on the south part of the main lode, the lode is small and unproductive. In Mayn's stopes, in the back of the 50, on the south part of the main lode, the lode is worth 2 tons of ore per fm. In Crew's stopes, in the bottom of the 40, the lode is worth 2 tons of ore per fm. In Gribbon's rise, in the back of the 40, on the south part of the main lode, no lode has been taken down. In Stanton's stopes, in the back of the 40, on the south part of the main lode, the lode is worth 2 tons of ore per fm. In Rowe's cross-cut in the 40, west of the engine-shaft, we have intersected the north part of the main lode; the lode is 1½ ft. wide, worth ½ ton of ore per fm., and looking very promising for further improvement. In the 30, east of White's cross-cut, on the south part of the main lode, the lode is 3 ft. wide, yielding good stones of ore occasionally. In Dunn's rise, in the back of the 20, west of Arthur's cross-cut, on the south part of the main lode, no lode has been taken down this week. There is no change to notice in any other part of the mine.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Dec. 28: Our monthly setting took place yesterday. The 90 fm. level cross-cut north was taken by six men, at 16l. per fm., stented the month. The 90 west, on No. 3 lode, was not taken; price offered 13l. per fm. The rise above the 62, on No. 7 lode, at 13l. per fm., by six men, stented the month. The winze below the 47, on the same lode, at 15l. per fm., by six men; I hope we shall effect a communication between the winze and the rise by the end of next month. The 47 fm. level cross-cut at 15l. per fm., by six men, stented 1 fm.; this end appears to be in a mixture of granite and elvan, and I hope we shall soon leave the latter.

SOUTH CRENVER.—E. Chegwin, Dec. 31: In the flat-rod shaft, sinking below the 105, the lode is 2 feet wide, producing stones of ore, and a little improved in the past week. In the 105 east the lode is 2½ feet wide, producing 1½ ton of ore per fathom, and ground favourable.—South Mine: In the 51, east of the cross-cut, the lode is 2 feet wide, producing good stones of tin; we have about 9 feet more to drive this end to get under the winze sinking in the bottom of the 32 fm. level. In the 51, west of the cross-cut, the lode is 2½ feet wide, producing good tinstuff, and ground more favourable for driving. In the winze sinking in the bottom of the 32 the lode is 2½ feet wide, producing good tinstuff, worth about 9l. per fathom. In the rise in the back of the 32 the lode is 2 feet wide, producing good tinstuff, worth about 4l. per fathom.

SOUTH DARREN.—J. Boundy, Dec. 31: Setting Report: The 80 to drive east of engine-shaft by six men, at 9l. per fm.; the lode at this point, for the last 6 ft., has been disordered by a small slide, but is now forming again in the present end, being 2 ft. wide; present value 9 cwts. per fm. The 80 to drive west by six men, at 7l. 10s. per fathom; the lode at this point maintains is value—10 cwts. per fm. To sink a winze below the 70 east by four men, at 7l. 10s. per fm.; we are sinking on the south part of the lode, in consequence of the water; therefore, the lode has not been cut through. The 70 to drive east of the shaft by six men, at 8l. per fm.; no lode has been taken down in this end for the last 3 fms., in consequence of the air being bad, and wanting to communicate with the winze sinking below the level above as soon as possible, after which the lode will at once be taken down. From the appearance of the lode I think it will yield pretty well. To drive west from the bottom of the winze in the 60 east, to meet the 70 driving east, by six men, at 9l. 10s. per fm. I hope in about a week to get this piece of ground holed, after which a new tribute pitch will be set in back of this level. The 20 to drive west of the air-shaft by four men, at 7l. per fm.; the lode at this point is 2½ ft. wide, containing copper, dark clay-slate, carbonate of lime, and lead ore, valued at ½ ton per fm., and indications of an improvement shortly. We shall commence taking down more lode in this end this week. The tribute pitches are set every two months. Very little has been done in the dressing department for the last ten days, in consequence of the frost.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, Dec. 30: In the 50, driving east, the lode is 1 ft. wide, producing ½ ton of ore per fm. In the adit east the lode is improving in size, now nearly 1 ft. wide. The tributers are raising good ore.

SOUTH LADY BERTHA.—R. Unsworth, Jan. 2: The 40 has been driven east of Williams's cross-cut about 75 fms.; the lode is 3 to 4 ft. wide, producing good stones of copper ore; the lode in the last 35 fms. driving is worth 1½ to 3 tons of copper ore per fathom. In the present end there is every appearance of having a great improvement shortly. Behind the end, 10 fathoms east and west of Leaman's rise, the lode is worth 2 tons of copper ore per fathom. The lode east of Leaman's rise, in the stope, is worth 2½ tons of copper ore per fathom. We are preparing to sink the engine-shaft to the 52, which will lay open good tribute ground, and enable us to increase our returns.

ST. DAY UNITED.—F. Pryor, Dec. 28: Our pay and setting went off as usual, very well. The mine is looking in every respect quite as well as last reported. Billing's shaft is worth for the length 80l. per fm. We are getting on very well with the necessary preparations for the new engine. I am glad to say we are not put to any inconvenience from the water throughout the mine.

ST. IVES WHEAL ALLEN.—H. Taylor, Jan. 2: In Giesler's engine-shaft, sinking under the 50 fm. level, the lode is 9 inches wide, with nothing to value. In the 50 fm. level, east of Giesler's shaft, on the carbona lode, in the sump-winze, we are obliged to take down some ground to get on the lode; we hope to complete it this week; the lode is 10 inches wide. On the carbona, 11 fms. west, we have not reached the end of the vein. We have cleared up a sink below the 45, east of Giesler's shaft; here we find the lode is 20 inches wide, with a promising appearance. The lode in the 30 fm. level, east of Giesler's shaft, is 14 inches wide, worth about 14l. per fm. At Richards' shaft, on the deep adit-clearing west, we hope to get to the end of the ground this week. We expect to complete the burning-house this week.

ST. JUST UNITED.—J. Carthew, Jan. 1: We took possession of this valuable property this morning, and I am now preparing the ladders which I purchased at Wheal Bal sale to place in Wheal Back and Wheal Bellew shafts. I calculate after those ladders are in I can set tribute pitches at once; in fact, I will again say you have a most splendid property. I still have my eye to the copper ground westward. I am convinced, from my personal knowledge of this district, that the mine in question will pay 100 per cent.

TINCROFT.—Wm. Teague, Jan. 1: Highburrow Lode: In the engine-shaft, sinking under the 148, the lode is producing saving work for tin. In the 148, driving east of shaft, the lode is worth for tin 8l. per fm. In Martin's east shaft, sinking under the 173, the lode is worth for tin 15l. per fm. In the winze sinking under the 173, east of shaft, the lode is worth for tin 20l. per fm. In the 173, driving east of shaft, the lode is worth for tin 8l. per fm. In the level driving east of shaft the lode is improving as we get clear of the cross-course.—Chapple's Lode: In the 162, driving west of down right shaft, the lode is poor. We have communicated the 152 west, as mentioned in my last report, and shall resume the sinking of the boundary winze under this level in about a fortnight from this date. The rise in the 120, on Highburrow lode, continues to be worth 10l. per fm.—Dunkin's Lode: In the 142, driving west of cross-cut, the lode is worth for tin 15l. per fm. The rise in the back of the 142 is without alteration since my last. All other places are much the same as when last reported.

TOLCARNE.—Jan. 1: Field's Lode: In Field's engine-shaft, sinking under the 30, the lode is over 2 feet wide, composed of gossan and spar, with spots of ore. In the 30 west the lode is 18 in. wide, composed of spar, granite, and gossan, with stones of ore, but not sufficient to value. The lode in the 30 east is 2 feet wide, composed of gossan, and spar, with spots of ore. The lode in the 20 west is 18 in. wide, composed chiefly of spar. In the 20 east the lode is 20 in. wide, composed of gossan, flookan, and occasional stones of ore. The lode in the 10 east is 20 in. wide, composed of gossan and flookan intermixed with black ore—a kindly lode. The lode in the winze sinking in the bottom of the 10 east is 1 ft. wide, opening tribute ground. The lode in the adit east is 15 in. wide, composed of gossan and spar, and looking more promising than for some time past.—Enthoven's Lode: The stope in the bottom of the adit west is 5 ft. wide, and worth for tin 25l. per fathom. The ground in the rise over the back of the adit, against King's shaft, is hard. The same may be said of the ground in the adit cross-cut driving south.

TREHILL.—H. Rickard: Our progress in driving the 50, west from old sump-shaft, during the past week has been rather slow, owing to the holidays, being Christmas week the ground in the end is composed of capel, killas, and mundic, with spots of copper ore; we have not got into the lode, but the end is letting out water freely. We are securing the back of the 40 about the slide, which will be completed in a day or two. We have broken some good work in Rapson's pitch, and I have set another pitch in back of the 40, east from western shaft, by two men, at 11s. in 1l. The weather is very severe for our dressing operations. The whole of the machinery is in good working trim.

TRELOWETH.—T. Richards, Jan. 2: The 144 end east is worth 8l. per fm.; pay for driving it 7l. per fm. The 144 west is worth 5l. per fm. The 134 end east is looking a little better, worth 5l. per fm.; ground much easier, and from the appearance of the end we may expect a richer lode soon. The 134 end west is worth 20l. per fm. The lode in the sump-winze is worth 15l. per fm. The stope east of sump-winze is worth 15l. per fm. The second stope east of sump-winze is worth 20l. per fm. The stope west of sump-winze is worth 12l. per fm. The rise in the back of the 124 west is worth 12l. per fm. The stope east of the 134 cross-cut is worth 10l. per fm.

TRENCROM.—R. Hollow, F. Bennetts, Jan. 2: The lode in the 100, east of Giesler's engine-shaft, is worth 2l. 10s. per fm.; set to drive by three men, at 2l. 15s. per fm. The lode in the 100, west of the engine-shaft, is worth 2l. per fathom; set to drive by three men, at 3l. per fm. The lode in the 90, east of the engine-shaft, is worth 3l. 10s. per fm.; set to drive by two men, at 2l. 15s. per fathom. The lode in the winze sinking below the 80, east of the engine-shaft, is worth 3l. per fm.; set to sink by four men, at 2l. 10s. per fm. Hollow's shaft is set to sink below the 30 by four men, at 8l. per fathom. The lode in the 30, east of Hollow's shaft, is split into branches: set to drive by two men, at 2l. 7s. 6d. per fm. The lode in the 30, east of Michell's flat-rod shaft, is worth 3l. per fm.; set to drive by three men, at 3l. per fm. The lode in the 30, west of the flat-rod shaft, is worth 3l. 10s. per fathom; set to drive by three men, at 3l. 5s. per fathom.—New Lode: The lode in the 60, east of the cross-cut north, is worth 3l. 10s. per fathom; set to drive by two men, at 55s. per fathom. The lode in the 60, west of the cross-cut north, is worth 2l. per fathom; set to drive by two men, at 70s. per fm. The 100 cross-cut set to drive north by four men, at 3l. 10s. per fathom. The 60 cross-cut set to drive south-east of the engine-shaft by two men, at 2l. 10s. per fm.

TREVENEN AND TREMENHEERE.—J. Webb, Jan. 1: The engine-shaft is become more hard and slow for sinking, and the lode not altogether so good. I hope it is only a hard floor of ground; we are forcing on the sinking by twelve men with all possible speed. The stopes at the 170 are yielding some good work, but not quite so valuable as they have been. The 170, driving east towards the old engine-shaft, is still passing through a whole piece of ground what we call an arch, left to stand by the old workers. We find the 150 very difficult for going ahead, in consequence of much water and sand driving the men back. We have now commenced to clear up the whim-shaft to endeavour to take up this water to relieve the 150 end. Some of the stopes in the back of the 140 are improved.

TREWEATHA.—Dec. 31: No change has taken place to notice in either the 30 north or south since last week's report. The ground in the cross-cut east at this level is still hard and spare for progress. No alteration in the 15 fm. level stope.

TRIMLEY HALL.—T. P. Thomas: The shaft is now down to a depth that we consider it advisable to drive to intersect the lodes, and also the adit level; the ground in the shaft is looking very promising, and should our lodes be found productive we shall soon have a profitable mine.

TRUMPET UNITED.—G. R. Odgers, Dec. 28: The lode in the engine-shaft, sinking below the 25, is 8 in. wide, producing some good work for tin—improving. The lode in the 25 west is 9 in. wide, producing good work for tin, worth 7l. per fm.; this is improving. The lode in the 15 west is 10 in. wide, and worth 7l. 10s. per fm. All the other bargains are progressing satisfactorily, but without any alteration since my last.

TYNEWYDD.—J. Ellis, Jan. 1: The cross-cut driving south from the foot of the hill is progressing satisfactorily, it is now extended 25 fathoms; we have passed several branches containing lead and copper ore. We have about 6 fms. more to drive before we expect to intersect the main lode; when cut at this point it will leave us about 14 fms. backs; we have opened several fathoms in back of the lode, and find it will yield full ½ ton of ore per fm.

UNITED MINES (Tavistock).—J. Tucker, Jan. 1: The ground is still favourable at the 72 east, and good progress is being made. The 60 end east is now yielding some of the best work for tin that I have seen in the mine for some time past. In the eastern end of the eastern pitch, in back of this level, the lode is 4 feet wide, all fair stamps' work; the pitch in back of the same level, west of winze, is about the same as last week, now within 6 ft. of a tinny lode; the winze below this level is suspended until the stull is in over it, and this will occupy another week.

VALE OF TOWY.—A. Waters, T. Harvey, Jan. 1: Clay's shaftmen are making good progress in opening for plat in the 110 fm. level. We have not yet broken into the lode, but shall do so as soon as the entrance to the plat is secured, which will be done in the course of a day or two; we have a fine-looking country rock here, and the wall of the lode shows good indications. In the 100, driving north, the lode is small, and not to value. From the water issuing from a vugh in the footwall we calculate that a larger and more open lode will soon be met with. The 100 south is still in hard ground; the lode is composed of rock and blende, with spots of copper ore throughout. In the 90, south of Field's, the lode is from 5 to 6 ft. wide, barytes, and yielding from 2 to 3 tons of highly crystallised blende per fm., with good saving work for lead ore in a branch against the hanging wall; the ground is soft, and will pay well to stope for blende alone. In the new adit, south of Nante, the lode is 4 ft. wide, composed of sulphate of barytes, but not to value for lead ore. The tribute department is the same as for some time past. Our pumping-engine is working at about 2½ strokes per minute. The weather is a little more favourable than when we wrote yesterday.

WEST BASSET.—W. Roberts, Dec. 30: The lode in Grenville's engine-shaft continues 5 ft. wide, producing 6 or 7 tons of ore per fm. In the 84 west the lode is improved, producing rich stones of ore, and likely for further improvement. In the 50 west there is no alteration since last reported, as the men are cross-cutting north to make a communication with a rise from the 65.

WEST BEAM.—W. Hosking, Jan. 1: The ground in the cross-cut going south to intersect the Brothers and other lodes continue the same as last reported on, being of a very favourable character for the production of mineral; this end is being driven by six men, at 7l. 10s. per fm. The clearing and securing the western shaft is going on satisfactorily. The walls of the engine-house are nearly up; the carpenter's shop and timber-house is completed; the engine and machinery is now being put on board the vessel at Wadebridge, and may be expected round at Totnes very shortly.

WEST DEVON CONSOLS.—G. Rowe, Jan. 2; Our prospects here are still of a very cheering character. The lode, although not quite so large as last reported on, is producing good quality yellow copper ore, and showing every indication of being exceedingly productive at a deeper level. The machinery and pitwork are all in good working order.

WEST PAR CONSOLS.—H. G. Webb, Jan. 2: The lode in the 65 end is worth 1 cwt. of tin per 100 (12 gallon) sacks; it is divided by a horse of killas; both parts are 3 ft. wide. The lode in the stopes below the 55 is 4 ft. wide, worth 3 cwts. of tin per 100 sacks. The lode in the 55 end is 1½ ft. wide, worth 1 cwt. of tin per 100 sacks. The tribute pitches are looking a little better.

WEST POLMEAR.—W. Body, Jan. 2: The 20 cross-cut is driven south of the engine-shaft about 64 fms.—driving at 6l. 10s. per fm. We have driven on lode No. 2 about 2 fms.; it is a strong gossan lode—driving at 3l. per fm., and on the north lode about 34 fms. east of the shaft; it is about 1½ ft. wide, and composed of peach and spar —driving at 2l. 5s. per fm.

WEST SNAILBEACH.—J. Richards, Jan. 2: In consequence of the severity of the weather it has frozen up the water which feeds the engine, and thus prevented the same from working for two or three days. To-day the weather is more favourable, and the men are again at work. The lode is not as yet cut through. We can make but slow progress, in consequence of the lode being so wet.

WEST SILVER BANK.—A. Francis, Dec. 31: Our wheel-pit has been commenced, but owing to the severity of the weather the masons for the last day or two have been unable to proceed with their work. As soon as we get an alteration no time shall be lost in getting it completed, and the wheel pumping-rods, pitwork, and crushing mill fixed. I am glad to be able to inform you that in sinking our engine-shaft the lode continues to improve; in fact, we have now a rich course of silver-lead ore through the shaft, and is improving every foot we sink. The men are making good progress with their bargain, and everything being pressed forward so as to bring the mine into a speedy state of returns and profits. Nothing will be left undone that can be accomplished to promote the welfare of the company.

WEST TOLVADDEN.—C. Pascoe, Dec. 30: Since my last report, on Nov. 4, we have continued sinking the shaft up to Dec. 12. The depth of the shaft under the 17 fathom level is 11 fms. 2 ft. 8 inches. In the last 3 fms. of sinking the lode has opened very much; it is now from 3 to 4 ft. wide, and is yielding some fine stones of copper on the north side of the lode. On the south side of the lode there are some beautiful branches of copper dropping in from the country. It is evident these branches are striking in from the south lode; we are saving all the small out of the shaft. We have stopped the sinking, and began to drive east and west; the lode is composed of some beautiful spar and blue flookan. I think in a little distance our ground will be much better, and in both levels we can drive from 4 to 5 fms. per month. We have also divided and cased down the shaft, and are now taking the stuff from the men with the whim-kibble. In driving 7 or 8 fms. east we might expect from the level above to meet with a good bunch of ore; the depth of this level is 17 fms. under the bottom of the sea; this will enable us to drive this level and stope the backs as far as it is thought proper. When this level is driven east to the caunter lode, and the south lode cut, we have every reason to believe that the south lode will be as rich as the one we are now working upon; if so, we shall be able to make a good sampling monthly. We have dressed the copper that was on the mine; it is now at Penzance, and will be sold on Jan. 21. There is about 50 perches of the sea wall to complete, which will be done in January, the work having been retarded by the late rough weather. Our cost, with the exception of the sea-wall, will be about 120l. per month.

WEST WENDRON CONSOLS.—R. Kendall, Dec. 28: The sumpmen have completed the pitwork, &c., and have commenced sinking the engine-shaft as fast as possible; the lode is much the same. The flat-rod shaftmen have nearly completed the plat; as soon as this is done we shall put down a 12-in. lift, and commence sinking with all speed. I believe this lode will prove productive when opened on.

WHEAL AGAR.—W. Roberts, Dec. 28: Tutwork Setting: Winstow's engine-shaft to sink under the 90 by nine men, at 25l. per fm. The 90 to drive east by four men, at 7l. 10s.; ditto west by four men, at 7l. 10l. per fm.: in each end the lode is 1½ foot wide, producing stones of ore. The 80 east by four men, at 6l. 10s.; the same level west by four men, at 6l. 10s. per fm.: in the western end the lode is 3 feet wide, producing good ore—tribute ground. A stope in the back of the 80 by four men, at 5l. per fm.; the lode in it is 3 ft. wide, producing 3 tons of ore per fm. The 70 east by four men, at 6l. per fm.; in this end the lode is 2½ ft. wide, composed of spar, blende, and stones of ore, a very promising lode. A winze to sink under the 70 by four men, at 9l. per fm. A rise in back of the 70 by four men, at 4l. 10s. per fathom, and 5s. in 1l. for the ores. Another rise in back of the 70 by four men, at 6l. per fathom, and 5s. in 1l. for the ores. The 60 cross-cut north by two men, at 6l. per fm. The 60 west by four men, at 6l. per fm. A winze to sink under the 60 by four men, at 6l., and the adit to drive west by two men, at 7l. 10s. per fm.—Tribute: A pitch in back of the 60 by four men, at 2s. 7d., one in the back of the 50 by two men, at 11s., and another in back of the 50 by two men, at 12s. 6d. in 1l. On the whole, the prospects of the mine are looking favourable.

WHEAL ARTHUR.—T. Carpenter, Jan. 2: Edward Lode: The lode in the 50 east is 4 feet wide, composed of spar, mundic, capel, and good stones of copper ore; driving by two men, at 6l. per fathom.—Middle Lode: The lode in Walter's winze, in bottom of the 50 west, is 3 feet wide, worth 9l. per fathom; sinking by six men, at 6l. per fm. The lode in the 50 west is 2 feet wide, worth 8l. per fathom; driving by two men, at 6l. per fathom. The lode in Burley's stope, in back of the 50 west, is 2 feet wide, worth 9l. per fathom; stoping by six men, at 40s. per fathom. The lode in the 50 east is 2 feet wide, worth 8l. per fathom; driving by four men, at 6l. per fathom. The lode in Rook's rise and stope, in back of the 50 east, is 2½ feet wide, worth 8l. per fathom; stoping by four men, at 50s. per fathom.—Middle Lode: The lode in the adit level west is 2 feet wide, composed of spar, prian, mundic, and copper ore, worth about 5l. per fm.; driving by four men, at 40s. per fathom. The lode in the adit level east is 2 feet wide, composed of spar, prian, mundic, and splendid stones of yellow copper ore; driving by two men, at 40s. per fathom No doubt but this lode will open out well when we get a little further off the cross-course, as we are only now 2 feet east of the cross-course.—Old Lode: The lode in the 50 west is 3 feet wide, worth 8l. per fathom; driving by four men, at 7l. per fathom. The lode in Jobe's rise and stope, in the back of the 50 west, is 3 feet wide, worth 8l. per fathom; working by four men, at 35s. per fathom. The lode in Palmer's shaft, in back of the adit east, is 3 feet wide, worth 5l. per fathom; stoping by two men, at 35s. per fathom. We weighed off at Calstock Quay, on Tuesday last, 110 tons 10 cwts. 3 qrs. of copper ore, and are preparing another parcel to be sampled by the end of this month.

WHEAL CREBOR.—Capt. Gifford, Jan. 2: We are prosecuting the cross-cut north in the 60 west; also the cross-cut south, in the 60 east, with all possible speed. The lode in the pitch in bottom of the 48 east is yielding 2 tons of ore per fathom. We have found the bottom of the sink in the 34 west, in the old workings, and I expect to set the same on tribute to-morrow. We have set Cox's shaft to sink below the 60 fm. level, 12 fathoms certain, to nine men, for 240l.; also to take out the penthouse in the 48, and put the same in the 60, to cut tramroad behind the lift and punch road, cut a trap-plat 9 feet long, 7 feet deep, and 7 feet wide, put in bearers and cistern, to fix the standing-lift from the 60 to the 48, put in hanging-rods and footway, &c., complete for 30l. = 270l., and if completed by the end of June next to have a bonus of 6l. The water in the old workings appears to be going down well, as the 48, west of Cock's shaft, is almost gone dry, and we are daily cutting more water in the cross-cut north, in the 60. We sampled at Morwellham yesterday a parcel of copper ore, computed 85 tons, the produce of which you shall have in a few days.

WHEAL CUPID.—R. Pryor, sen., Dec. 28: The lode in the rise in the back of the 40, east of shaft, is 20 in. wide, composed of gossan, prian, with stones of ore. The lode in the 40 fm. level, west of cross-cut, is 2 ft. wide, composed principally of mundic and spar, sprinkled with yellow ore—a kindly looking lode. I think in about 6 feet more driving this lode will form a junction with the work lode, at which point a change for the better may be expected. The ground in the cross-cut is much the same as last reported on.

WHEAL EMMA.—R. Dunstan, Dec. 27: The 70 fm. level has improved; it is now worth 1½ ton per fm., and we expect a further improvement as we are nearing the winze gone down from the 58; the lode in the 58 is disordered by a cross-course, but there is an appearance of improvement. The 46 continues just the same as last reported. We have commenced the 76 west on the flookan, and intend driving as far as where the ore is gone down in the bottom of the 46 before we cross-cut to the lode. The tribute department continues just as usual. We have set a winze to-day to sink from the 46 to the 58, at 4s. 6d. in 1l. We are about to sample 140 tons, and I believe it will realise more money than the last sale, and I hope we shall continue to improve in quality.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Dec. 28: The 110, west of the shaft, to six men, at 5l. 10s. per fm.; lode full 2 ft. wide, of quartz and prian, with stones of ore and malleable copper; this is partaking of very much the same character the 100 did prior to the improvement, and which is about 16 or 18 fms. behind it. The 100 west, to four men, at 3l. 10s. per fm.; lode altogether 2 ft. wide, composed of quartz, prian, peach, &c., with yellow, grey, and black ore, yielding from 1½ to 2 tons of good ore per fathom—a pretty lode, and looking as if it were near a good deposit of ore. The 90 west, to four men, at 6l. per fm.; lode 10 in. wide, of mundic, with yellow and grey ore—a kindly lode, and producing saving work. A winze to sink below the 80 east; lode 2 ft. wide, of gossan and quartz, with stones of ore—a kindly lode; set to four men, at 6l. per fathom. The 80 west, to four men, at 5l. per fm.; lode small. The 80 fm. level cross-cut north, to eight men, at 18l. per fm.; we do not see any alteration in the ground. A pitch in back of the 100 west, to four men, at 7s. 6d. in 1l. A pitch in back of the 90 west, to two men, at 13s. 4d. in 1l. A pitch in back of the 80 west, at 13s. 4d. in 1l. In conclusion, we are happy to state that the lode in the 100 west has undergone a decided change, the ore being precisely of the same character as that found further east, and if we may be allowed to judge, it looks promising for continuing.

WHEAL GRYLLS.—E. Rogers, Jan. 1: Fisher's Lode: Annie's engine-shaft is progressing very favourably; the lode is 3 ft. wide, worth 25l. per fm. The lode in the 20, east of this shaft, is improving, worth 7l. per fm. In a winze in bottom of the 10 there is also a great improvement; the lode is in soft ground, and worth 20l. per fm.—Georgia Lode: You are already aware that we have cut a slide in the shaft, which has cut off the lode in the north end of the said shaft. In the south end of the shaft the lode is worth 40l. per fm., and the ground not so hard as it has been.

— E. Rogers, Jan. 2: Fisher's Lode: Annie's engine-shaft is down 4 fathoms 3 feet below the 20 fathom level, and we have just passed through a slide; the lode in the shaft under this slide is 3 feet wide, worth 25l. per fm. At the 20 east the lode is improved, worth 7l. per fm.; in the same level, east of the flat-rod shaft, the lode is worth 5l. per fm.; in the end west the lode is worth 6l. per fm. In the winze in the bottom of the 10 there is also a great improvement; the lode is worth 20l. per fathom. In the winze in bottom of the adit there is no alteration; the lode is worth 10l. per fm. In Georgia engine-shaft we have also cut a slide in the north end of the shaft, which has disordered the lode in that place, but the south end of the shaft is worth full 40l. per fm.; we expect this slide will have the same effect on this lode as the one in Annie's shaft, where there is a rich lode immediately under the disordered ground. The masons have finished the loading, and are now building a wall to carry the stamps' axle.

WHEAL HARRIETT.—S. Williams, Dec. 28: The engine-shaft is without change during the week. The lode in the 115 fm. level end is producing rich stones of tin, not sufficient to value. The lode in the 100 east end is small and unproductive. In the deep adit cross-cut we have cut another branch, 4 in. wide, producing mundic and a little copper ore; when the cross-cut is further advanced we ought to open on it, as it has a good appearance, although at present small. Nothing new in any other part of the mine.

WHEAL NORRIS.—J. Nance, J. Andrews, Dec. 29: We put our new pumping-engine to work this afternoon, and am pleased to say it went off well. The water in Carter's shaft has very much abated in the past week, and hope we shall be able to do the preparatory work for bearers and cistern, without putting down the 10-in. lift, as we expected we should be obliged to do when we wrote you last. There has been but little alteration in the underground department since last report, in consequence of Christmas coming in the early part of the week, and on Thursday morning we commenced to make the necessary alterations in our pitwork; also, from the rotary to the pumping-engine, in consequence of which the water has been in ever since, but we hope it will be in fork on Monday morning, so that all the men can go to work again in their respective bargains.

WHEAL POLLARD.—W. C. Cock, Dec. 31: We are using every available means in order to get on as fast as possible with the building of the new engine-house, although the severe frost during the past month has much retarded our progress. The atmosphere to-day, however, seems to indicate a change, which I trust will be favourable. We have taken out the engine, and have removed all the heavy parts and the boiler to the new mine. Some little repairs are necessary, which the engineer will attend to while the house is being erected.

WHEAL PROSPIDNICK.—R. Kendall, R. Sincock, Dec. 28: Watson's shaft is sunk 5 fms. below the 22; sinking with nine men, at 15l. per fm.; lode 12 in. wide, yielding a little tin. The 22 east is driving with three men and three boys, at 4l. per fm.; lode worth 4l. per fm. The 22, west of Watson's shaft, is driving with three men and three boys, at 4l. per fm.; lode poor. The stopes in back of the 22 east are working with six men, at 3l. per fm.; lode worth about 15l. per fm. The cross-cut at the 22 east is driving with two men, at 4l. 10s. per fm.; we expect to see the lode this week. We sold yesterday 3 tons 8 cwts. 3 qrs. 21 lbs. of tin.

WHEAL SHEPHERDS.—H. Bennetts, Jan. 1: No alteration to notice in the lode since my last report; the lode is 2 feet 6 inches wide; the appearance of the lode is very promising, and the ground is favourable for driving.

WHEAL SICILY.—J. Pope, Jan. 1: I find the water is drained to the back of the level, and I should say will be quite out by the end of the present week, when we shall resume driving on the east and west lode at once, which, when we discontinued the ends, in consequence of the water getting into the mine, had a very promising appearance, producing some good work for lead. We are now driving south on East Wheal Jane lode, the lode on which they are erecting their engine. This lode, so far as seen in Wheal Sicily sett, which is about 50 fms., varies in size from 1 to 3 feet wide, and is composed of gossan, prian, mundic, and soft spar, with every indication of making a good lode as we drive south, where we shall soon be 20 fms. deep. This driving will also intersect a caunter lode, and several east and west lodes, which will, I have, no doubt, improve the prospects of the mine very much. In the adjoining mine the engine will be set to work shortly, which will be a great assistance to us, and enable us to sink deeper, when I have no doubt we shall have a good mine.

WHEAL SIDNEY.—W. Edwards, Jan. 2: For the last fortnight we have been impeded in our operations by the great increase of water in the 60 cross-cut issuing from the lode after the heavy rains. The sinking of the winze also, in the 46, has been interrupted; it is 9 feet below the 46, and the lode is still very good. The 46 end is being driven westward to get under the shoots of tin gone down from the level above, the first of which we hope to reach within about 8 fathoms from our present end. Our surface operations are proceeding very well, and I hope to be able in my next report to give more satisfactory information.

WHEAL UNION.—T. Glanville, Jan. 1: In consequence of the increase of water in Moyle's shaft, we are not able to drive the 46. In the other parts of the mine there is no change to report on.

WHEAL UNITY CONSOLS.—W. H. Reynolds, Dec. 31: We have re-set the 85 to two men and two boys, at 60s. per fm.; the lode is much improved, and yielding good saving work for copper. The 75 west is re-set to six men, at 7l. per fm., the lode promising, yielding some ore, and improving as we leave the cross-course. The 50, west of cross-course, is set to three men and three boys, at 20s. per fm.; the lode is made up of prian, peach, spar, and a leader on the footwall yielding good dredgy work, and looks likely for a great improvement. The 50 cross-cut south is set to three men and three boys, at 40s. per fm. The 50 cross-cut north is set to two men, at 40s. per fm., and in each place we expect to cut a lode very shortly. The pitches throughout the mine are just as for some time past.

YARNER.—R. Barkell, Dec. 31: The 40 west is much the same as it has been for some time past, producing saving work. The 30 west has improved, now worth 3 tons per fathom; the stope in the back of this level is yielding 5 tons per fathom. The stope east of shaft is also worth 5 tons per fathom. The winze sinking below this level is producing 2 tons per fathom. No other alteration.

CALIFORNIA QUICKSILVER.—A San Francisco paper estimates the quantity of quicksilver raised during the past year to date at 29,864 flasks, valued at $952,519. This is an increase on the produce of 1857, the largest export year previously, of 2586 flasks. The aggregate product of nine years has amounted to 184,410 flasks, worth $5,309,838.

WEATHER PREDICTIONS.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—I now ask your permission to refer to my meteorological predictions for the past year. I beg to state that I shall not notice any attacks, come from what quarter they may; but when I see that any other scientific gentleman can make these predictions with more accuracy than myself, I shall very willingly retire from the subject. Considering that the discovery I made with reference to the order of our climate is barely one year old, still, with one or two exceptions, every gale and meteorological change for the last four months has been foretold. The following predictions were published in the *Mining Journal* at the dates named:—

Dates of the predictions.	Gales, &c., predicted for.	Dates the gales commenced, and locality.
Sept. 28	Oct. 7, thunder and lightning	Oct. 8, thunder & lightning, and rain.
„ 28	„ 11, gale	„ 11, gale, Plymouth.
„ 28	„ 13, gale	„ 13, gale, the Channel.
Oct. 15	„ 17, strong wind	„ 18, strong wind, London.
„ 15	„ 28, gale	„ 28, gale, North Sea.
„ 30	„ 30, gale	Nov. 1, severe gale.
Nov. 2	Nov. 4 & 5, gale	Nov. 4 and 5, gale, Plymouth and Channel.
„ 2	„ 8, storm, thunder & lightning	„ 10, thunder & lightning.
„ 2	„ 9, gale	„ 11, severe gale.
„ 2	„ 12, gale	„ 13, hurricane,
„ 10	„ 17, gale	„ 17, gale, North.
„ 10	„ 18, gale	„ 18, gale, Holyhead.
Dec. 5	Dec. 7, gale, thunder and lightning	„ 7, gale, Carnarvon, thunder, lightning, rain.
„ 5	„ 10, strong wind and rain	„ 10, strong wind & rain,
„ 5	„ 12, strong wind and rain	„ 12, ending with gale.
„ 5	„ 18, gale, with rain	„ 18, gale, with rain.

Also the dull weather to the end of December. Previous to the above, the fine weather for the months of August and September was foretold in the *Times* and the *Globe* newspapers. The only failure I made was in the weather for October last; the cause of that failure was the approach of the comet now visible in the heavens. The approach of that body was also foretold; as, also, the great comet of June 30. This fact is well known to Mr. Hind, notwithstanding his letter in the *Times*.

Admiral Fitzroy has stated it is impossible for any person to predict a gale, or other phenomenon, for more than two days. The above statement will show that I have predicted not only gales, but even electric storms, for more than *fourteen* days before they occurred, and that with an accuracy never before attained by any other person.

With reference to coming events, gales are again due for the 5th and the 11th. I stated winterly weather would set in about the 5th; it may be a little later, as to all appearance another comet is approaching the sun, in addition to the one now visible.

G. SHEPHERD, C.E.
Author of the "Climate of England."

26, *Throgmorton-street, Jan.* 2.

CORNISH PUMPING-ENGINES.—The number of pumping-engines reported this month is 29. They have consumed 2105 tons of coal, and lifted 16·6 million tons of water 10 fms. high. The average duty of the whole is, therefore, 53,100,000 lbs. lifted 1 ft. high by the consumption of 112 lbs. of coal. At Dolcoath, they stop stem times and the lift is idle. At Carn Brea, a pair of rolls are worked to crush the samples.

CLERICAL, MEDICAL, AND GENERAL ASSURANCE SOCIETY.—Few associations the operations of which have during a period of 38 years achieved such an unchequered success as that which has attended the career of the Clerical, Medical, and General Assurance Society. During the quinquennial period just concluded, the new assurances effected were for a total of 1,486,370*l.*, being an augmentation, as compared with the corresponding period immediately preceding, of 62,215*l.* The income of the society, which at the conclusion of the previous quinquennial amounted to 166,800*l.*, reached 195,400*l.* on June 30, 1861, showing an increase since the last division of profits of 28,600*l.* The assurance fund has also advanced from 1,154,276*l.* to 1,422,191*l.*, being an increase of 267,915*l.* In June last the number of assurances in force was 7559*l.*, and the sum payable under them, including bonuses, 4,537,914*l.*, being an increase during the five years of 1100 in number, and 719,154*l.* in amount. The surplus of assets over liabilities, after deducting the proprietors' capital, amounted to 289,447*l.*, of which sum, according to the society's special Act of Parliament, 50,000*l.* was set aside as a permanent reserve fund, and at the meeting held on Thursday, under the presidency of the right hon. Robert Mowbray, M.P., it was unanimously agreed to divide 237,000*l.* in the proportion of one-sixth to the proprietors and five-sixths to the assured, being the seventh division of profits since the incorporation of the society. These facts cannot but demonstrate that, with matured strength and increased solidity this society maintains all its early elasticity and vigour. Ample reserves, resulting from cautious modes of valuation, have secured to it many sources of undeveloped profit for future realisation, whilst the economical management and careful supervision of its funds will contribute in no small degree to their steady accumulation. These considerations leave no reasonable doubt as to the fuller expansion of this society's operations, and justify the confident hope of its increasing prosperity and usefulness.

"MINING AND SMELTING MAGAZINE."—Under this title the first number of a new monthly, edited by Mr. Henry C. Salmon, has just been issued, and to judge from the original papers contained, and the position of the contributors, it seems likely that the work will form a useful addition to the library of the practical miner and metallurgist. The first paper is by Mr. Edward Hull, on "The History and Present Position of the British Coal Trade." The first of Mr. Mark Fryar's "Chapters on the Methods of Working and Ventilating Coal Mines" forms the next paper, and contains much useful information. In addition to these, we find a careful description of Oxland's process for separating wolfram from black tin, of Thomas and Vincent's fixed frame in use at Cook's Kitchen and other mines, and of the Concave Circular Buddle invented by Mr. Hundt, of Siegen, in Westphalia, and introduced into this country by Messrs. Phillips and Darlington, and Capt. Wm. Hollow. Each of these descriptions have ample illustrations to render them intelligible to all, that relating to Mr. Hundt's buddle being a well-executed lithographic plate. This brings us to the end of the original matter and to the twentieth page of the book, where a series of abstracts commence, comprising Mr. Thomas Oldham's Mineral Statistics of India, from the *Friend of India;* explanations of the Standards for Tin and Copper; reviews of Dr. Percy's Metallurgy, Wallace's Mineral Deposits, and Bristow's Glossary of Mineralogy, and a large amount of statistical information connected with Mining and Metallurgical Commerce.

ELLIS LEVER'S MINING ALMANACK.—A useful sheet almanack, under this title, has just been issued by Mr. Ellis Lever, of Gorton Mine Material Works, Manchester. In addition to the usual almanack information, the sheet contains a list of the office-bearers of the Royal Society, British Association, Geological Society, Coal Exchange, Government School of Mines, North of England Institute of Mining Engineers, Glasgow School of Mines, International Exhibition, South Wales Institute of Engineers, Institution of Engineers in Scotland, Manchester Geological Society, Institution of Civil Engineers, and Wigan Mining and Mechanical School. The sheet also contains some valuable statistics and memoranda, extracted from Mr. Hunt's Mineral Statistics and the *Mining Journal*. Upon the whole, the almanack may be regarded as worthy of a place in mine offices generally.

INDIAN GUARANTEES CONSIDERED.—The question of Indian Guarantees is one concerning which so much interest is felt, and upon which opinions are so conflicting, that every item published in connection with it is read by those having money at stake with the greatest avidity; the views of such as Mr. W. P. Andrews and the *Times* are regarded with suspicion, and authorities previously unknown, and whose opinions would at other times be passed over without consideration, rise rapidly into notoriety, by simply taking the anti-Indian side of the controversy; the writings of James Mills are looked upon with as much reliance as those of James Mill, and the merest pigmies of the commercial world are ridiculously classed with those whose experience enables them to pronounce an opinion entitled to general consideration. Taking advantage of this state of things, the Editor of the *Limited Liability Journal* has republished two articles, which originally appeared in his journal, in a pamphlet form; and, as the more important portions of the Government stipulations are quoted, it is worthy of perusal. We cannot, however, see that the articles prove that capitalists holding Indian guarantees have anything whatever to fear.

ADCOCK'S ENGINEERS' POCKET-BOOK.—The edition of this work for the current year is now published, and contains, in addition to the usual matter, several valuable original articles, and some new scientific data. We would gladly testify to the accuracy of the information given, but are compelled to say that the innumerable errors in last year's volume are reprinted in that now before us, and that even the abstract of the postal regulations and rates of postage has not been corrected; as an example of which we may mention that the postage of a letter to Portugal, which has been reduced for a very long period to 4d., is still stated at 1s. 9d.; and that the inaccuracies in other parts of the book are of an equally glaring character. If the data inserted in the pocket-book be corrected, the work will become an extremely useful guide.

HINTS ON HOME EDUCATION.—Under this title Mr. Frederick Bridges, the phrenologist, of Liverpool, has just issued a neat little volume, from which mothers may learn that education should be guided by phrenological and physiological principles, and the reasons that such should be the case. The work is a popularly-written treatise upon animal physiology, from which much useful information may be obtained without the labour of studying a technical work upon the subject. As the work emanates from a professional phrenologist, it may be presumed that the brain is described from a phrenological point of view, the argument being that as the eye cannot hear, nor the ear see, so each particular portion or organ of the brain has its particular and distinct function, and cannot perform the functions of any other portion or organ. The work will well repay attentive perusal, and we think few will read it without being induced to hope that phrenology will ultimately be reduced to a science of some value to mankind.

ENGINEERS, ARCHITECTS, AND CONTRACTORS' POCKET-BOOK.—The edition of this very excellent annual (so long published by Mr. John Weale, of High Holborn) for the current year, has just been issued by Messrs. Lockwood and Co., and contains a large amount of information peculiarly valuable to those for whose use the pocket-book is compiled. The obituary of eminent engineers and architects for 1860-61, which is always an attractive feature in the work, is this year particularly interesting, from containing notices of John Wood, Macgregor Laird, Louis Josephe Vicat, Gen. Sir W. Pasley, Eaton Hodgkinson, James Braidwood, Richard Grainger, William Hosking, Joseph Maudslay, Henry Austin, Sir W. Cubitt, Bunsen, the Earl of Aberdeen, Sir F. Palgrave, and many others of less note. We cordially commend the pocket-book to the engineering and architectural professions generally.

Now ready, price 6s., or 78 postage stamps, Mr. THOMAS TAPPING on the COLLIERY AND ORE-MINE INSPECTION AND TRUCK ACTS. The work can be had from the *Mining Jornal* office, 26, Fleet-street.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, January 3, 1862.

COPPER.	£ s. d.
Best selected....p. ton	110 10 0— —
Tough cake..... „	107 10 0— —
Tile ..... „	107 10 0— —
Burra Burra .... „	103 0 0-(Nom.)
Copiapo ..... „	— — —
Copper wire .....p. lb.	0 1 2 — —
ditto tubes ..... „	0 1 2 — —
Sheathing & bolts .. „	0 1 0 — —
Bottoms ..... „	0 1 1 — —
Old (Exchange) .... „	0 0 10¼— —

IRON.	Per Ton.
Bars, Welsh, in London..	6 5 0— —
Ditto, to arrive	5 17 6— 6 0 0
Nail rods	7 0 0— —
„ Stafford. in London	7 0 0— 7 10 0
Bars ditto	7 5 0— 8 0 0
Hoops ditto	8 10 0— 9 0 0
Sheets, single	9 0 0— 9 10 0
Pig, No. 1, in Wales ..	3 0 0— 4 0 0
Refined metal, ditto....	4 0 0— 5 0 0
Bars, common, ditto....	5 0 0— —
Ditto, merchant, in Tees	6 10 0— —
Ditto, railway, in Wales	5 0 0— 5 2 6
Ditto, Swed. in London.	11 10 0—12 0 0
To arrive	12 0 0— —
Pig, No. 1, in Clyde....	2 8 0— 2 18 0
Ditto, f.o.b. in Tees ..	— — —
Ditto, forge, f.o.b. in Tees	— — —
Staffordshire Forge Pig.	3 10 0— 3 12 6
Welsh Forge Pig	— — —

LEAD.	
English Pig	20 0 0—21 0 0
Ditto sheet	21 0 0— —
Ditto red lead	22 10 0— —
Ditto white	28 10 0—30 0 0
Ditto patent shot	22 10 0—23 0 0
Spanish	19 10 0— —

BRASS.	Per. lb.
Sheets	10d.-11d.
Wire	10½d.— —
Tubes	10¾d.-11¾d.

FOREIGN STEEL.	Per Ton.
Swedish, in kegs (rolled)	— — —
„ (hammered).	16 0 0—17 0 0
Ditto, in faggots.....	17 0 0—17 10 0
English, Spring	18 0 0—23 0 0
Bessemer's, Engineers' Tool	44 0 0— —
„ Spindle	30 0 0— —
QUICKSILVER	7 0 0 p. bottle

SPELTER.	Per Ton.
Foreign	17 10 0— —
To arrive	17 10 0— —

ZINC.	
In sheets	24 0 0— —

TIN.	
English, blocks 120	0 0— —
Ditto, Bars (in barrels)..121	0 0— —
Ditto, Refined 122	0 0— —
Banca 120	0 0-121 0 0
Straits 118	0 0— —

TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 8 0— 1 9 0
IX Ditto 1st quality „	1 14 0— 1 15 0
IC Ditto 2d quality „	1 4 6— 1 6 6
IX Ditto 2d quality „	1 11 0— 1 13 0
IC Coke ..... „	1 2 0— 1 2 6
IX Ditto..... „	1 8 0— 1 8 6
Canada plates ....p. ton	12 10 0—13 0 0
In London; 20s. less at the works.	
Yellow Metal Sheathing	p. lb. 10d.
Indian Charcoal Pigs in London	6 12 6— 6 15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—At present there is no marked improvement to report in metals. Until a decisive solution of our difficulties with America shall have been arrived at, no material revival of trade can be expected. The present suspension of business is entirely to be traced to this cause, and not, as perhaps might be supposed, to any ordinary change in the market. Should our newly-awakened hopes of a peaceful settlement of the *Trent* affair be realised, a large increase in the demand for metals may speedily ensue for America. The stocks there are fast diminishing, and prices advancing, and as they can be better supplied by England than by any other country, a large proportion of their orders will naturally flow into our market again. Advices from India are tolerably satisfactory, and raise expectations of a larger trade as the season advances. With France gradually, but surely, opening up to our manufactures, and a growing demand for the colonies, we may, if peace continues, and no unforeseen events occur, look forward to the present being a more prosperous year than that through which we have just passed.

COPPER.—English descriptions, though still inactive, have experienced no alteration in fixed rates; some few parcels however, in the hands of timid or weak holders, are to be met with in the market under price, but purchasers for the most part limit their operations for the present. Foreign is but moderately enquired for, nevertheless sellers are not inclined to force sales by making any large sacrifice in price; it is mostly in strong hands, and held for higher rates than are just now obtainable. Burra Burra quoted 103*l.*; Kapunda, 103*l.*; Chili, 92*l.*, in Liverpool; yellow metal, exceedingly quiet.

IRON.—In railway bars considerable depression exists, and prices rule somewhat easier. Buyers can now make their purchases at 5*l.*, f.o.b. at the works; merchant bars in fair request. Manufacturers have, in consequence of the scarcity of railway orders, been obliged to submit to a further reduction of about 2s. 6d. per ton; present prices, 5*l.* 2s. 6d. in Wales, and 5*l.* 17s. 6d. f.o.b. in the Thames. Staffordshire makers continue without much improvement; the few orders given out from time to time are mostly for small quantities, and almost exclusively for best qualities. Inferior brands are difficult to move. Swedes bars partake of the general quietude, but the stock is greatly reduced, and higher rates are pretty confidently anticipated as soon as the navigation is finally closed for the season. Scotch pigs have advanced slightly during the week, to the extent of about 3d. per ton; mixed numbers quoted 49s., market closing to-day 49s. to 49s. 3d.

LEAD.—Our quotations for English pig are unaltered. The amount of business transacting is very moderate, though the prices now ruling are below the average; buyers hold off for the present. Sheets and shot remain dull of sale. For bar a rather better enquiry exists. Spanish pigs, 19*l.* 10s. per ton.

TIN.—The demand for English descriptions shows but little improvement. Previous to the American outrage on board the *Trent* the tin market was stiffening, and American order were coming over more freely than at any period since the commencement of the civil war; and if, as is now considered probable, our peaceful relations should not be disturbed, a large demand for America may be looked for, and our market will most likely rapidly recover itself. Banca now quoted 120*l.*; Straits, 118*l.* cash, 120*l.* three months prompt.

SPELTER.—There is more business doing in this metal, and prices have advanced somewhat during the week; business is reported at 17*l.* 7s. 6d., 17*l.* 10s., and even 17*l.* 15s., but there are still sellers at 17*l.* 10s. The stock in warehouse here has increased since the corresponding period last month nearly 900 tons, being on Dec. 1, 5176 tons, against 6040 tons on January 1. ZINC remains steady, at 24*l.*

STEEL.—In foreign a large business has been done for spring shipment, and prices have advanced to 16*l.* for Swedes keg, ex ship to arrive, and 17*l.* in warehouse here. The quantity in stock being unusually light, there is a probability that our market will be entirely cleared some time before the spring shipments arrive.

THE SCOTCH IRON TRADE—ANNUAL REPORT.—The iron trade continues to manifest an irrepressible expansion. The quantity of pig-iron produced in the last 12 months has been 1,035,000 tons, showing an increase of 35,000 tons over that of the preceding year. During the year the total deliveries amounted to 927,000 tons, and exhibit an increase of 24,000 tons when compared with those of 1860. The stock has, therefore, increased 108,000 tons, and is now (exclusive of Carron) 535,000 tons, lying in the makers and warehousekeepers' stores. It must not, however, be forgotten that it is only here the stocks of iron have accumulated, and when a great demand for the article shall arise, it is from Scotland alone that a prompt supply can be obtained. The fluctuations in the price have scarcely exceeded 2s. 6d., either above or below the average price of 49s. 3d. per ton for the year, and were chiefly governed by conflicting operations for a rise or a fall. The lowest price reached was 47s. in March; the highest 51s. 9d. in August. The malleable works, foundries, and shipbuilding yards on the Clyde have, as well as other branches of industry, felt, though not as yet severely, the disastrous effects of the American revolution. Still the quantity of iron used in the local consumption has been only 3000 tons less than that in the last year. Meanwhile the year, gloomy from its first hour, grows full of shadows at its close. But should war arise, we have the melancholy, but still satisfactory, consolation that we shall engage in the same in defence of a just principle, and to assert alike the interest of the world's commerce, and the rights of our common humanity.—THOMAS THORBURN: *Glasgow, Dec.* 31.

GLASGOW, DEC. 30.—The past year has been characterised by disappointment and great distress to almost all classes of the commercial community, ours being no exception; it opened hopefully, in the expectation that an early solution of the American difficulty would be effected, and that our successes in China, combined with the fruits of the Commercial Treaty with France, would bring us largely increased orders. These expectations have to a great extent been frustrated by the continuance of the American civil war. Prices have been unusually depressed, fluctuating between 47s. and 52s. per ton, according as the chances of peace or war preponderated. The average number of furnaces in blast has been 123, producing 1,050,000 tons. Miners have wrought steadily, and their average wages have been 3s. per day, being 6d. under that of last year. The shipments and railway deliveries during the year have been very satisfactory, being 596,000 tons, or 23,000 tons in excess of those of 1860. There have been shipped—

Coastwise	318,000 tons,	against	318,000 in 1860,	and	316,000 in 1859.
Foreign	266,876 „		255,000 „		254,000 „

Of which France has taken 61,632 tons, against 50,013 in 1860, and 51,345 tons in 1859.

Germany & Holland ..	94,219	„	69,469	„	33,215 „
Russia	876	„	3,925	„	5,669 „
Spain and Portugal ..	13,385	„	9,934	„	8,629 „
United States	34,482	„	77,632	„	85,187 „
British America.....	17,093	„	15,165	„	10,777 „
Italy	25,484	„	15,255	„	10,470 „

The local consumption is estimated at about 7000 tons per week, our foundries and malleable ironworks being well employed during the first half of the year; now, however, in common with other branches of industry, they complain of orders coming forward too slowly. Our iron shipbuilding yards have been well filled during the year, 86 vessels having been built, their gross tonnage amounting to 62,875 tons, and there are now upon the stocks 34 vessels, whose tonnage will amount to 30,350 tons; this result is gratifying, showing larger returns than any year since 1854. Stocks have increased 106,000 tons during the year, and now amount to 566,000 tons, 380,000 tons being in the hands of makers, and 186,000 in the stores of Messrs. Connal. The average price of pig-iron has been 49s. 3d. per ton, being unusually low and unremunerative to the maker. We can only express the hope that an early settlement of the pending American war may give a stimulus to the commercial industry of the world, which is at present so much cramped, and doubt not that iron will be amongst the first to partake in the general prosperity.—JAMES WATSON AND CO.

THE TIN TRADE.—Mr. N. Breebaart (Goll and Co., Amsterdam), under date Dec. 31, writes:—The market has been under the influence of the Anglo-American incident. The uncertainty which has existed, and still prevails, in regard to the issue of those differences has paralysed business, which, in consequence, has been very insignificant.

BANCA TIN.	1861.	1860.	1859.
Stock on warrants Nov. 30 .....Slabs	62,028 ..	69,964 ..	61,011
Deliveries in December	8,057 ..	4,750 ..	2,950
Stock on warrants Dec. 31.....	53,971 ..	65,214 ..	58,061
Stock in hands of Trading Society for their annual sale	73,236 ..	78,678 ..	70,937

From the beginning of this month the demand ceased, and amongst the holders there were soon some to be found disposed to sell at a reduction. One single transaction took place at 71 fl., and some others at 71½ fl. During the last week the market was less depressed; 71¼ fl. was refused, and 72 fl. paid for small lots. Below this price there are no sellers at present. A glance at the statistical details is sufficient to lead to the conviction that the position of the article is favourable; but, as long as this political uncertainty continues, it is impossible to form a correct opinion for the future. The deliveries since the date of the last sales, up to the present period, amount to 116,110 slabs, against 103,824 slabs in 1860, and 94,317 slabs in 1859.

Even the little glimmering of peace which the news from America brings us this week has given strength and tone to almost every security, and clearly indicates the good effect that a satisfactory and peaceable arrangement will have upon the markets generally; in fact, so much money is lying unemployed, and waiting for the turn of events, that a general scramble to buy will succeed the late stagnation, and prices will advance rapidly. Already in the MINING SHARE MARKET—which we never considered would be materially influenced by war, except that metals would be affected, and dividends reduced for a time—a reaction has set in, and the demand for several mines has caused a good advance in prices. Metals are not so firm, or at so good a price as we could wish them, but "peace" will again open our best markets, and we may look for a rise in the standard. By the way, we have often referred to the "standard" for copper ores, and it is generally looked upon as the barometer of mining prosperity; but in an article upon the subject in the first number of the "Mining and Smelting Magazine," just published, it is shown to be a mere myth, inasmuch as the standards of the 12th and 19th of December, although they showed an advance of 3*l.* per ton, there was no actual advance in the price of ores—that is to say, when the price of copper ores was put up to suit the smelters and sellers of copper, the miner did not get any better price for his ores. But let us take it the other way: when the standard is put down does not the miner at once get a *less* price for his ores? The fortnightly settlement this week in the market was very heavy, particularly in East Carn Brea, and in consequence of a short supply of shares for delivery the price rose to 10¼, buyers, on the account day; they have since been lower, but leave off 10¼ to 10⅜. Since the settling a large business has been done in South Frances, Wheal Uny, East Carn Brea, East Caradon, Marke Valley, Wheal Mary Ann, Trelawny, Wheal Basset, South Tolgus, West Caradon, East Russell, Condurrow, Bryn Gwiog, North Roskear, Prosper United, North Treskerby, Treloweth, Wheal Grenville, East Grenville, Herodsfoot, Rosewall Hill and Ransom United, Wheal Union, Par Consols, and a few small and speculative shares.

East Caradon shares have been particularly firm, and in demand, and advanced to 30, leaving off 29⅞ to 30¼; the mine has improved in the 50 east, which is now worth 90*l.* per fm.; the 60 east 50*l.* per fm. Faucett's lode is worth 12*l.* per fathom. The new lode has been driven east, and is worth 30*l.* per fathom. At the meeting, on Thursday next, we believe a dividend of 15s. per share will be declared. Marke Valley, 9¾ to 10; the dividend here on Thursday next will probably be 5s. per share. Cook's Kitchen, 28¼ to 29¼; the dividend here on Tuesday will be about 7s. per share. Bryn Gwiog, 26 to 27; the mine has improved in the shaft to 5 tons per fm. Carn Brea, 75 to 80. Carn Camborne, ¾ to ⅞; Condurrow, 60 to 65; East Basset, 20 to 52½; East Russell, 2¾ to 3; Grambler and St. Aubyn, 16 to 18; Great Wheal Fortune, 12 to 13; Herodsfoot, 37 to 39; Hingston Down, 3⅞ to 3¾; North Basset, 2¾ to 3; North Downs, 4¼ to 4¾; North Robert, 17s. to 19s.; North Treskerby, 18 to 20. Rosewall Hill and Ransom United, 2¾ to 2⅞; at the meeting on Dec. 28, the accounts showed a profit on the quarter of 206*l.* 19s. 6d., and a balance in favour of the company of 564*l.* 8s. 6d.; the mine is looking well. Wheal Uny shares have been in good demand, and leave off 5⅛ to 5¼. Prosper United, 40s. to 45s.; Providence Mines, 40 to 42; Rosewarne United, 17 to 18; Sortridge Consols, 11s. to 12s. South Caradon shares have declined to 310, 315; South Tolgus, 47½ to 50, and in demand. Cwm Erfin, 20; at the meeting, on Monday a dividend of 15s. per share was declared; the accounts showing a balance in hand of 1147*l.* 9s.; the mine is looking well. Pendeen, 4¼ to 4⅜; at the meeting the accounts showed a loss on two months of 374*l.* 4s. 7d., and a balance in favour of the mine of 1104*l.* 4s. 11d. St. Ives Consols, 26 to 28; Stray Park, 30 to 31; Tincroft, 7¾ to 8; Treloweth, 26 to 28s., and in good request. Wendron Consols, 10½ to 11; West Basset, 14 to 14¼. West Caradon shares advanced to 49, and leave off 46¼, 47⅛; West Seton, 270 to 280. Wheal Basset shares have been in demand, at 86 to 88. Wheal Clifford Amalgamated, 28 to 30. Wheal Crebor, 8s. to 10s.; the mine has sampled 85 tons of copper ore; the stopes are turning out about 20 tons per month, which will more than half pay costs, and pitches about to be set in the old mine; the prospects, therefore, are good. Wheal Grenville shares leave off 35s. to 37s. 6d., after a large business; the 100 west continues rich, and the 110 getting into good ground. Wheal Grylls, 13⅜ to 14¼; at Annie's engine-shaft, under the slide, lode worth 25*l.* per fm.; at Georgia engine-shaft the lode is worth 40*l.* per fathom. Wheal Arthur, 15s. to 16s.; Wheal Ludcott, 2¼ to 2½; Wheal Margaret, 40 to 41; Wheal Mary Ann, 16 to 17; Wheal Seton, 122 to 124; Wheal Trelawny, 16 to 17. Wheal Unity, 13s. to 15s., and improving in the 50. Long Rake, 13¼ to 14; driving has been commenced in the 58 fm. level east and west, saving work for lead. West Polmear, 4s. to 5s.; East Grenville, 31s. to 33s. South Frances have been largely dealt in, and in good demand up to 120, but leave off flatter, at 113 to 115. We hear of no change in the mine, and the western levels are showing great prospects. North Roskear, 21 to 23, and in demand. From the improvements in the mine the shares are likely to advance.

On the Stock Exchange transactions in Mining Shares have been rather numerous during the week, and prices generally firm. The following quotations were officially recorded in British Mining Shares:—East Caradon, 28⅞, 29; East Carn Brea, 10, 10⅛, 10¼; Wheal Margaret, 39¼, 40; North Frances, 4⅞; Wheal Basset, 86¼; East Basset, 52; Lady Bertha, ½; Wheal Edward, 2½; Wheal Mary Ann, 16¼. In Colonial Mining Shares the prices were:—Great Northern Copper of South Australia, 1⅛, 1¼; Scottish Australian, 1⅛, 1⅛, 1⅛; Dun Mountain, 1, 1⅛; Bon Accord, ⅛, ¼; Port Phillip, 1⅛, 1⅛; Kapunda, 2⅛; Worthing, ⅛. In Foreign Mining Shares the prices were:—United Mexican, 8⅛, 9, 8⅛, 8⅛, 8⅛, 8⅛, 8⅛, 8⅛; St. John del Rey, 52⅛, 51, 51¼, 52¼; East del Rey, 1⅛, 1⅛, 1⅛, 1⅛.

The closing quotations for shares in new undertakings were:—Ocean Marine Insurance, 5⅛, 6⅛ prem.; Thames and Mersey Marine, 1 5-16, 1 7-16 prem.; Universal Marine Insurance, 1⅛, 1¼ dis.; London and Provincial Marine, ⅛, ¼ dis.; Mercantile Fire, 9-16, 11-16 prem.; Commercial Union Fire, ⅛, ¼ dis.; Indian Carrying Company, par to ¼ prem.; Hindostan Copper Company, ⅛, ⅜ prem.; and the shares of the London and Burton Brewery Company were dealt in at ¼ prem. Transactions have also taken place in Llanmorlais Colliery, Amman (Aberdare) Colliery, Cardigan Consols, and St. Just United shares.

MINING EXCHANGE SHARE LIST.—The following is forwarded to us officially from the Mining Exchange as business done during the week:—

SATURDAY, DEC. 28.—East Carn Brea, 9 13-16th, ⅞; Wheal Uny, 4⅞; East Buddnick, 2s. 9d., 2s.; Wheal Unity, 14s.; Wheat Seton, 123; North Crofty, 32s., 32s. 9d.

MONDAY.—Wheal Seton, 123; East Caradon, 29, 28⅝; Wheal Grylls, 14; East Carn Brea, 9⅞, 15-16ths; West Caradon, 44⅛.

TUESDAY (Settling day).—East Carn Brea, 9⅞, 10, 9 15-16ths, 10 1-16th, ¼, ⅜, ⅛, ⅜; North Roskear, 21¾, ⅛, 21¾; Stray Park, 30; Wheal Seton, 122¼, 122; Wheal Grenville, 36s.; Wheal Grylls, 14, 13⅞.

WEDNESDAY.—Wheal Seton, 122⅜; East Carn Brea, 10¼, ⅛, 10⅜, 3-16ths; North Roskear, 21, 20¾; Stray Park, 30¼; Wheal Edward, 1 15-16ths, 2.

THURSDAY.—East Carn Brea, 10⅛, 3-16ths, ¼; Wheal Uny, 5 3-16ths, ⅛, 5⅜ 11-16ths; Long Rake, 14; East Caradon, 29¼, ½; Stray Park, 30¼; Wheal Grylls, 13⅞; Wheal Grenville, 37s. 6d.

FRIDAY.—Wheal Seton, 121, 122, 123; Rosewall Hill, 2⅛; Wheal Uny, 5⅝; Wheal Edward, 2; North Robert, 17s. 9d., 18s.; Stray Park, 30⅜; East Carn Brea, 10¼.

IRISH MINE SHARE MARKET.—That money is abundant, and no apprehension exists as to the issue of the difference with America on the *Trent* affair, is evidenced by a buoyancy in Government and other securities rarely observed at this season of the year. Mine shares have been largely dealt

in, particularly those of the Wicklow Copper Mining Company and the Mining Company of Ireland. The directors of the latter company have circulated their report in anticipation of their next half-yearly meeting, to be held on the 6th inst., when it is recommended to declare a dividend of 12½ per cent., instead of 10 per cent. as for the previous six months. The several mines of this company are in a most satisfactory state of working, and promise well for the future; the shares (7*l.* paid) are in request, at 15*l.* 17s. 6d. Wicklow Copper shares are freely taken at 53*l.* 15s., at which price they offer great inducement for investment. Of speculative mines—General Mining Company for Ireland are most in genuine favour, but cannot command more than 5*l.* 7s. 6d. per share. Connorree shares keep their prices up to 31s. 6d. and 32s. Carysfort shares are not in request, the small amount left of the original capital being considered quite inadequate to retrieve past errors and outlay.

The following are the Government Returns of the exports of articles identified with mining, the produce and manufacture of Great Britain, for the eleven months ending Nov. 30, 1861; and also as compared with the eleven months ending Nov. 30, 1860; extracted from the "Accounts relating to Trade and Navigation," published by the Board of Trade:—

DECLARED VALUE FOR THE ELEVEN MONTHS ENDING NOV. 30.

	1860.		1861.	Decrease.
Coals and culm	£3,104,665		£3,366,604	—
Hardwares and cutlery	3,397,191		3,158,200	£238,991
Machinery:—				
Steam-engines	£1,112,042	£1,116,917		
Other sorts	2,345,532=3,457,574	2,749,551=	3,866,468	—
Total	£9,959,430		£10,391,272	—
Metals:—Iron—Pig	£913,674	£986,344		
Bar, bolt, rod	2,183,582	1,715,588		
Railway	3,188,338	2,762,122		
Wire	228,789	193,594		
Cast	777,375	642,182		
Wrought	3,071,942=10,363,800	2,648,323=	8,948,163	1,415,437
Steel	883,793	656,531		227,262
Copper—Unwrought	676,100	407,292		
Sheet, and yellow metal	1,660,125	1,296,692		
Wrought	219,149= 2,555,374	248,804=	1,952,725	602,649
Brass	190,958	152,671		38,287
Lead—Pig	489,276	398,913		
Ore—Litharge	148,471= 637,747	135,386=	534,299	103,448
Tin—Unwrought	334,246	323,523		
Tin-Plates	1,400,182=1,734,428	817,821=	1,141,344	593,084
Grand total	£26,325,330		£23,777,005	£3,219,158
Less increase—Coals and culm, 261,939*l.*; machinery, 408,894*l.*				670,833
Total decrease				£2,548,325

At Redruth Ticketing, on Thursday, 2988 tons of ore were sold, realising 18,685*l.* 9s. The particulars of the sale were—Average standard, 128*l.* 1s.; average produce, 7; average price per ton, 6*l.* 6s.; quantity of fine copper, 210 tons 2 cwts. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore copper.
Dec. 5	4679	£136 2 0	6¼	£5 14 0	£91 17 0
„ 12	3073	132 12 0	6⅛	5 9 6	88 7 0
„ 19	6089	135 12 0	5⅝	4 11 6	86 15 0
„ 26	9001	132 7 0	5¾	4 16 0	84 3 0
Jan. 2	2988	128 1 0	7	6 6 0	88 8 0

Compared with the sale of last week, the decline has been in the standard 1*l.*, and in the price per ton of ore about 1s. 4d. Compared with the corresponding sale of last month, the decline has been in the standard 5*l.*, and in the price per ton of ore about 6s. 8d.

At the Swansea Ticketing, on Dec. 24, 1119 tons of ore were sold, realising 16,490*l.* 0s. 0d. The particulars of the sale were—Average standard, 100*l.* 8s. 6d.; average produce, 15½; price per ton, 14*l.* 14s. 6d.; quantity of fine copper, 173 tons 9 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
Nov. 26	1380	£119 17 0	11 9-16..	£11 12 6	£100 10 0
Dec. 10	1450	117 4 0	11 9-16..	11 5 6	97 10 6
„ 24	1119	109 8 6	15½	14 14 6	95 1 6

Compared with last sale the decline has been—in the standard, 2*l.* 10s.; and in the price per ton of ore about 7s. 9d. Compared with the corresponding sale of last month the decline has been—in the standard 5*l.* 5s., and in the price per ton of ore about 16s. 3d. Of the 1119 tons of copper ore sold on Tuesday, 340 tons were from British mines, which gave an average produce of 10½, and sold at an average standard of 113*l.* 14s. 6d.=9*l.* 15s. per ton of ore. The remaining 779 tons were foreign ores, which gave an average produce of 17¾, and sold at an average standard of 107*l.* 14s.=16*l.* 18s. per ton of ore. On Jan. 7 there will be offered for sale 1585 tons of ore from Cobre, Wheal Maria, Ookip, Holyford, Spain, &c.

The Foxdale Mines (Isle of Man) have declared a dividend, payable on Jan. 15, of 1*l.* per share on the old shares (2560ths, 25*l.* paid), and 16s. per share on the new shares (240ths, 20*l.* paid)—being equal to 4 per cent. on each for the last quarter.

At Rosewall Hill and Ransom United Mines meeting, on Dec. 23, the accounts for the three months ending Oct., showed—Balance last audit, 357*l.* 9s.; tin sold, 1753*l.* 5s. 10d.=2110*l.* 14s. 10d.—Mine cost, merchants' bills, and sundries, 1546*l.* 6s. 4d.; leaving credit balance, 564*l.* 8s. 6d. The profit on the three months' working was 206*l.* 19s. 6d. Capts. Treweeke and Thomas reported favourably upon the position and prospects of the mine.

At the Clifford Amalgamated Mines meeting, on Dec. 18, the accounts showed—Mine cost, Sept., 2413*l.* 3s. 11d.; October, 2722*l.* 13s. 5d.; tributers' balances, 307*l.* 11s. 7d.; merchants' bills, 2870*l.* 11s. 7d.; coals, on account, 1390*l.*; Redruth and Chasewater Railway bill, 258*l.* 15s.; Clifford adventurers' materials, 236*l.* 13s. 8d.; United Mines ditto, 107*l.* 12s. 4d.; Trefulack ditto, 19*l.* 3s. 9d.; ticketing expenses, 11*l.* 14s. 11d.=10,338*l.* 0s. 2d.—Ore sold and sundries, 9202*l.* 7s: leaving debit balance, being loss, 1135*l.* 13s. 2d. Capt. John Richards reported that Wheal Clifford district was looking very well. In United Mines, though very poor at present, there were several points to explore which held out encouragement for future success. The accounts, as was expected, show a loss of rather more than 1100*l.*; to account for this, there is but one month's ore credited against two months' cost; and the bills have been very heavy, so as to get the machinery above and below ground in a proper state of working. At the next account they will pay off this debt on the book, and leave from 2000*l.* to 2500*l.* profit.

At the Gwydyr Park Mine meeting, on Monday, the accounts were examined and passed, showing assets over liabilities of 53*l.* 7s. 11d. A call of 3s. per share was made, payable on or before Jan. 21. It appears from Capt. Smyth's report that they have from 5 to 6 fathoms more to drive of the deep adit level west to get under the ore ground in the level above. The end is at present in a dead bar of ground, rather hard to get through; the lode is about 1 foot wide, composed of very good spar mixed with lead ore, and producing good stones of the latter.

At the New Birch Tor and Vitifer Consols Mine meeting, on Monday (Mr. J. Rowlands in the chair), the accounts showed—Balance last audit, 38*l.* 1s. 5d.; ore sold, 2886*l.* 13s. 4d.=2924*l.* 14s. 9d.—Mine cost, 1838*l.* 13s. 3d.; merchants' bills, 392*l.* 16s.; dividend, 300*l.*: leaving credit balance, 395*l.* 5s. 6d. Capt. Symons considered the present prospects very encouraging.

At Llywernog Mine meeting, on Wednesday, the accounts will show—Loan received, 200*l.*—Mine cost, merchants' bills, and registration of company, 174*l.* 4s. 4d.: leaving credit balance, 25*l.* 15s. 8d. The company has been divided into 2000 shares of 3*l.* each, and the whole of these shares have been handed over to the vendors for the transfer of the mine to the company. The shares are to be considered as 1*l.* paid, and liable to 2*l.* per share call. Mr. J. B. Balcombe, the secretary, reports that the financial position of the company in a matter of congratulation; every share is subscribed for, and it has not a shilling of liability or debt unpaid, with an available capital of 3500*l.* for future operations.

At East Fowey Consols Mine meeting, on Wednesday (Mr. Barnes in the chair), the accounts showed—Paid for mine, 4760*l.*; mine cost, registration of company, agency, and sundries, 568*l.* 1s. 6d.=5328*l.* 1s. 6d.—Calls received, 4717*l.*: leaving debit balance, 611*l.* 1s. 6d. A call of 4s. per share was made. It was resolved to wind-up the company voluntarily,

At Budnick Consols meeting, on Monday (Rev. E. J. Treffry in the chair), the accounts for the four months ending September showed—Balance last audit, 2544*l.*; mine cost, merchants' bills, and sundries, 3073*l.* 12s. 9d.=5617*l.* 12s. 9d.—Calls received, 1697*l.* 9s. 7d.; tin sold, 1307*l.* 5s. 4d.: leaving debit balance, 2612*l.* 17s. 10d. A call of 10s. per share was made. The committee reported that since the last meeting capitalists of high standing have purchased shares to the extent of one-fifth of the whole mine. The Duchy of Cornwall have liberally consented to reduce the rate of dues since November, 1860, from 1-18th to 1-60th dish, and the committee think that the other lords of the soil would benefit themselves as well as the adventurers by consenting to similar reductions. Capts. Puckey and E. Dunstan have inspected the mine, and have reported favourably upon it; and Capts. Evans and Mitchell, the agents of the mine, think that the stopes are yielding moderate stamping work; the tribute pitches on the whole are improved since last account, and returns will probably be increased when the 40 and 50 fathom levels are drained.

At the Dale Mine meeting, on Tuesday (Mr. J. Orton in the chair), the accounts showed a debit balance on the three months' working of 28*l.* 17s. 4d. Mr. Penrose was re-elected director. Details appear in another column.

At West Lovell meeting, on Tuesday, the accounts to the end of October showed a debit balance of 759*l.* 17s. 8d. A call of 1*l.* per share was made, 16s. 10½d. being for cost already incurred, and 3s. 1½d. for the further development of the mine.

At East Gunnislake and South Bedford Mines meeting, on Tuesday (Mr. W. A. Thomas in the chair), the accounts for the three months ending October showed—Balance last audit, 374*l.* 11s. 11d.; ore sold and carriage, 369*l.* 0s. 11d.; calls received, 641*l.* 7s. = 1384*l.* 19s. 10d.—Mine cost, merchants' bills, and sundries, 261*l.* 14s. 1d.; leaving credit balance 123*l.* 5s. 9d. Captains W. G. Gard and J. Phillips reported that they had the same elements of success in view as made Gunnislake, Devonshire, and Wheal Crebor so profitable.

At Devon New Copper Mine meeting, on Tuesday (Mr. C. Otter in the chair), the accounts prepared to date showed a balance in hand of 76*l.* 12s. 2d. to meet a call now due, amounting to about 300*l.* The resolution of a former meeting, canceling 8000 of the original 20,000 shares, was rescinded, and the directors were authorised to issue 2000 shares on the best terms they could. Details in another column.

At the Pendeen Mine meeting, on Tuesday (Mr. Bawden in the chair), the accounts for the two months ending December showed a loss of 374*l.*; and a general statement of assets and liabilities showed a balance in favour of the mine of 1104*l.* Details will be found in another column.

At Ashburton United Mines meeting, on Tuesday (Mr. John Arnold in the chair), the accounts for the three months ending November showed—Balance last audit, 1250*l.* 6s. 1d.; mine cost, merchants' bills, and sundries, 2386*l.* 9s. 4d.=3636*l.* 9s. 5d.—Tin sold, 1288*l.* 2s. 7d.; calls received and sundries, 1837*l.* 1s. 7d.: leaving debit balance, 511*l.* 5s. 3d. Capt. Wm. Edwards reported that the number of hands employed was 150. The 24-inch cylinder engine and boiler are complete, is all on the mine, and the rest of the machinery and surface operations are working satisfactorily.

At East Devon Great Consols Mine meeting, on Dec. 30, the accounts showed—Balance last audit, 32*l.* 16s. 10d.; mine cost four months ending November, 662*l.* 8s.; sundries, 5*l.*=709*l.* 4s. 10d.—By calls, 373*l.*: leaving to debit, 327*l.* 4s. 10d. A call of 3s. per share was made. Capts. T. Neill and T. Richards, in reporting on the mine, say—"The 40 fm. level cross-cut south has been extended altogether about 30 fms., and two lodes found therein, which are composed of beautiful spar, mundic, and copper ore. We are extending on the last lode met with; its appearances are very favourable, in good ground for mineral, and its direction being very fast south of east. In about 20 fms. more driving it will form a junction with the south copper lode, which in the Devon Consols within the last few months has been found and still continues very productive for copper ore. This must be considered as a highly favourable feature for East Devon, and we do not see (to ensure the same results) any better course to adopt for the future than to continue on the present operations; and seeing such a change for the better has taken place in the character of the lode at the 52, we are sanguine that an extension westward at this level, driving the 40 to intersect the south copper lode, and cutting the lode at the 64, will open up a valuable and productive mine. The operations progress favourably, and the engine and pitwork are in good order and working well."

At Furze Hill Wood Consols meeting, on Dec. 26 (Mr. J. W. Stephens in the chair), the accounts for the three months ending October showed—Balance last audit, 163*l.* 7s. 5d.; calls received, 450*l.*=613*l.* 7s. 5d.—Mine cost, merchants' bills, and sundries, 362*l.* 12s. 11d.: leaving credit balance, 250*l.* 14s. 6d. A call of 2s. per share was made. Capts. Gregory and Pomroy reported that they hope to have all their machinery erected and in full work and the mine in fork, so as to be working on the lodes, within four weeks from this date. Shortly after they calculate on being in a position to make sales of tin ore, judging from the good prospects before them.

A petition for winding up the St. Dennis Consols Mining Co. (Limited) is to be heard in the Stannaries Court on the 14th inst.

LEEDS, JAN. 2.—In consequence of the holidays, very few transactions have taken place in mining shares, neither can they be expected until the new year has a little advanced. The unsettled aspect of the dispute with America also prevents parties from investing. Enquiries have been made after Brea Consols, North Hallenbeagle, and Wensleydale. A considerable improvement has taken place in each of these mines, and a considerable advance may be looked for. Investors should lose no time in purchasing in each of these concerns.—EDWARD BROOK, Mining Broker, 5, Bank-street.

LEEDS, JAN. 2.—In Mining Shares enquiries have been made, though little business has been done, sellers not being willing to take the low prices offered: quotations remain firm:—Brea Consols, 20s. to 23s.; Craven Moor, 2s. 6d. to 3s. 6d.; Cornubia, 15s. to 17s.; Hebden Moor, 23s. to 25s.; Merryfield, 6s. to 8s.; North Hallenbeagle, 12s. to 13s.; North Jane, 36s. to 38s.; Wet Groves, 7*l.* to 8*l.*; West Burton Gill, 100*l.*; Yorkshire, 10s. to 11.

MERRYFIELD MINE.—This mine continues to improve, and is now carried on with vigour; it produced 9 tons of ore last month, which more than paid the cost of the mine; shares are difficult to get.—J. GLEDHILL AND CO.

COAL MARKET.—On Monday there were 23 arrivals. The tone of the market for house coals was stronger, and a general rise of 3d. per ton established. Hartley's were not so active as last week, and prices without alteration. Manufacturers' quiet, at previous value. Best house coals, 17s. 6d. to 18s. 3d.; seconds, 15s. 6d. to 16s. 6d.; Hartley's, 15s. to 16s.; manufacturers', 13s. to 14s. 6d. per ton.—On Wednesday there were 36 fresh ships arrived. The market steady, and all descriptions of coal quoted the same as on Monday.—On Friday the arrival of 60 fresh ships caused a dull market for all kinds of coal, but prices remain without alteration. Hetton Wallsend, 18s. 3d.; South Hetton Wallsend, 18s. 3d.; Kepier Grange Wallsend, 16s. 9d.; Gosforth Wallsend, 16s. 6d.; Harton Wallsend, 16s. 6d. Hartley's, 15s. to 16s.; Tanfield Moor, 12s. 6d. per ton: 28 cargoes unsold; 85 ships at sea.

LIVERPOOL COAL TRADE.—From the Coal Circular of Messrs. Platt we learn that the quantity of Cannel, coal, coke, and patent fuel shipped at Liverpool in December was 47,717 tons, and in the corresponding month of last year 20,875 tons, showing an increase last month of 26,842 tons. The total shipments from January to December were 648,182 tons; same period of 1860, 602,821 tons—increase this year, 45,361 tons.—The exports of coal coastwise during December were 9747 tons; same month last year, 15,903 tons—decrease last month, 6156 tons. Total coastwise from Jan. to Dec., 93,003 tons; same period in 1860, 159,972 tons—decrease in present year, 66,969 tons.

NEW COMPANIES IN THE PAST YEAR.

Company.	Capital.	Company.	Capital.
Amman Colliery	£100,000	Mwyndy Iron	160,000
Atlas Coal	10,000	Metropolitan Consumers' Coal	50,000
Asphaltum	200,000	Metropolitan Rifle Range	60,000
Bahia Steam	160,000	Mercantile Joint-Stock Bank	1,000,000
Corsican and Mediterranean Gas	25,000	Metropolitan and Provincial Bank	1,000,000
Commercial Copper Smelting	1,000,000	Malta and Mediterranean Gas	60,000
China and Japan Steam Naviga.	300,000	National Horse Exchange	50,000
China River Steam	200,000	National Marine Insurance	1,000,000
Compressed Coal	100,000	National Credit	500,000
Chesterfield and Midland Silkstone Colliery	40,000	Natal Land	225,000
Canadian Land and Emigration	250,000	Natal Cotton	50,000
Cannock Chase and Ogley Land	100,000	National Boat Building	200,000
Economic Omnibus	50,000	Oriental and General Marine Ins.	1,000,000
Elbe Colliery	15,000	Patent Bituminised Pipe	30,000
East Del Rey Mining	75,000	Patent Waterproof Glue	20,000
General Tramroad	200,000	Patent Screwed Boot and Shoe	40,000
General Telegraphic Works	50,000	Paris Land	100,000
Hindostan (Singhbhoom) Copper	120,000	Queensland Cotton	50,000
Hafod Lead Mining	50,000	Roodee Iron	100,000
Indian Carrying	100,000	River Salado Steam	240,000
Liverpool and New Orleans Steam	200,000	Thames Valley Railway	250,000
Llanmorlais Colliery	20,000	Staffordshire Potteries Street Ry.	20,000
London and Burton Brewery	120,000	Seend Iron	100,000
London Suffrance Wharf Co.	250,000	Slate Mountain	30,000
London and Provincial Discount	250,000	Trust and Agency of Australasia.	500,000
London and Provincial Agricul.	100,000	Universal Private Telegraph	100,000
Lambeth Bridge	40,000	Venezuela Cotton	200,000
Montes Aureos Gold	200,000	Zamora Tin	12,000

THE PROGRESS OF MINING IN 1861.

This week we give a few more of the Dividend Mines, and have pleasure in anouncing that the pamphlet will be ready early in the week. This Review, the eighteenth annual, forms this year the most elaborate and valuable epitome of mining progress ever issued to the public. It gives the official returns, with the state and prospects, in a concise form, of the principal and *bona fide* mining undertakings in Cornwall and Devon—thus forming a useful book of reference for the investor, and a valuable guide for those embarking in mines.

MINERS' ASSOCIATION OF CORNWALL AND DEVON.—The quarterly meeting of this association was held on Monday, in the Town Hall, Redruth. In the absence of the President and Vice-presidents, the chair was occupied by Mr. R. Q. Couch, of Penzance. It was expected that Mr. Reginald Gryll would have read his promised paper on the "Direction of Mineral Veins," but a letter was read from him, stating that in consequence of indisposition he should be unable to attend. Papers were read by Mr. Cady, contributed by Mr. Twite, on "Winding Machinery;" by Mr. R. Pearce, on "Incrustations in Steam-Boilers," contributed by Dr. Angus Smith; and by Mr. Paull, containing the result of the observations made by Mr. Fletcher, chief engineer to the Association for the Prevention of Steam-Boiler Explosions in Manchester and the neighbourhood. The Chairman also contributed some information relative to the ages of and mortality amongst miners.

GEOLOGICAL SOCIETY.—Papers to be read on Wednesday:—1. On the Carboniferous Limestone and Yellow Sandstone of Farlow and Oreton, Clee Hill, Salop, by Prof. J. Morris, V.P.G.S., and Mr. G. E. Roberts, with a Note on a new species of Pterichthys, by Sir P. Egerton.—2. On some Fossil Plants, showing structure from the Lower Coal Field of Lancashire, by Mr. E. W. Binny, F.G.S.

GEOLOGISTS' ASSOCIATION.—On Monday, Prof. Tennant, F.G.S., will read a paper on "Limestones."

RAILWAY CAPITAL.—The railway capital called up during the year 1861 amounted to 13,593,609*l.*; and the payments to be made during January reach a total of 447,035*l.*

RAILWAY AND JOINT-STOCK LEGISLATION OF THE ENSUING SESSION.—Of the 250 notices given in November for new railways and works, the necessary parliamentary requirements have been complied with in the case of 226.

CRYSTAL PALACE FOR THE PARISIANS.—A *société anonyme*, with a capital of 25,000,000 francs, is in course of formation for constructing a "palais de cristal" in the Bois de Boulogne. The council of administration comprises a number of gentlemen well known both in France and this country—the French portion including the Marquis de la Roche-Aymon, Count de Santivy, the Marquis de Monclar, M. Pasqualini, and Prince A. Galitzin; and the English portion, Messrs. S. Beale, M.P., T. N. Farquhar, and Wm. Jackson, M.P. Sir Joseph Paxton has accepted the office of architect in chief; Mr. Edwin Clarke that of consulting engineer; and Mr. Thomas Brassey that of contractor-general. It is intended to make the Crystal Palace of the Bois de Boulogne especially attractive by concentrating within it magnificent halls for public entertainments, and a vast nave for the exhibition of fine arts, manufactures, and horticulture. The saloons will be ample in area and rich in decoration. Balls, concerts, art festivals, literary and national reunions, will find accommodation worthy of the advancement of the age, but which hitherto has been wanting to the Paris of Napoleon III. The exhibitions will be permanent, and it is anticipated that new intercourse will be created between producer and consumer unburdened by intermediaries or by distant and uncertain correspondence. To provide for the general expenses the sinking fund and the maintenance of the building, &c., there would be the rents from exhibitors, the rents of restaurants, cafés, &c., the commission on the sale of pictures, statues, objects of art, and flowers, the reserved seats, and the rents for advertising placards, so that the entrance-money will represent the profit to the shareholders, which it is considered will be equal to 50 per cent. on the capital.

The proposed "Mercantile Bank" has amalgamated with the proposed "Metropolitan and Provincial Bank." The nominal capital of each was 1,000,000*l.*, of which 250,000*l.*, or 25*l.* per share, was to be called up, and they now state that they have nearly 9000 shares, or 900,000*l.*, subscribed in the aggregate.—*Times*.

THAMES TUNNEL COMPANY.—Receipts for the week ending Dec. 28, 120*l.* 16s. 1d.; number of passengers, 28,993.

GEOLOGY—KING'S COLLEGE, LONDON.—Prof. TENNANT, F.G.S., will COMMENCE a COURSE of LECTURES on GEOLOGY on FRIDAY morning, January 24th, at Nine o'clock. They will be continued on each succeeding Wednesday and Friday at the same hour. Fee, £2 12s. 6d.
R. W. JELF, D.D., Principal.

ORGANIC CHEMISTRY.—Dr. HOFFMAN, F.R.S., will COMMENCE a COURSE of THIRTY LECTURES on ORGANIC CHEMISTRY on TUESDAY NEXT, the 7th inst., at Ten A.M., to be continued on each succeeding Wednesday, Thursday, Friday, and Tuesday, at the same hour.
These lectures will be delivered at the laboratory of the Government School of Mines, College of Chemistry, Oxford-street. Fee for the course, £2.
TRENHAM REEKS, Registrar.

LEAD ORES.

Sold on the 27th December.

Mines.	Tons.	Price per ton.	Purchasers.
Isle of Man Mining Company	100	£14 0 0	—

Sold on the 28th December.

Wheal Mary Ann	60	24 10 6	Stock & Co.

Sold on the 31st December.

Minera Mining Company	100	12 10 6	Walker, Parker, & Co.
ditto	100	12 11 0	ditto
ditto	40	12 7 6	ditto
ditto	100	12 10 0	ditto
ditto	30	12 7 6	ditto
North Minera	20	11 16 0	ditto

Sold on the 1st January.

Dyliffe	65	12 6 6	Newton, Keates, & Co.
ditto	65	12 8 0	A. Eyton.
Llanerchyraur	49	13 8 6	Walker, Parker, & Co.
Dyfngwm	55½	12 0 0	Newton, Keates, & Co.
ditto	35½	11 18 0	ditto
Rhoswydol	18½	11 6 6	Walker, Parker, & Co.
ditto	9	11 11 0	ditto
Aberdovey	7¾	11 17 6	ditto
ditto	7¾	11 17 6	Newton, Keates, & Co.
Tyralltwen	3¾	11 13 0	A. Eyton.

BLENDE.

Sold on the 30th December.

Mines.	Tons.	Price per ton.	Purchasers.
Great Retallack	460	£1 4 0	Vivian & Sons.

Sold on the 31st December.

Minera Mining Company	80	2 0 0	Kenrick, Wright, Courage.
ditto	80	2 5 0	Courage & Co.
ditto	106	3 3 0	Vivian & Sons.
ditto	24	2 6 6	Courage & Co.

BLACK TIN.

Sold on the 21st December.

Mines.	Tons	c.	q.	lbs.	Price per ton.	Amount.	Purchasers.
Garlidna	5	13	0	6	£71 10 0	£ 404 3 3	—Bissoe.
ditto	1	4	3	20	60 0 0	74 15 8	— ditto
North Roskear	6	15	3	9	67 0 0	455 0 6	—Mellanear.

Sold on the 28th December.

Drake Walls	3	10	0	0	70 12 6	—	—Daubuz & Co.
ditto	3	10	0	0	70 12 6	—	—Bissoe Co.
ditto	6	0	0	0	66 12 6	—	—Daubuz & Co.
ditto	6	0	0	0	66 12 6	—	—Bissoe Co.

COPPER ORES.

Sampled Dec. 18, and sold at Tabb's Hotel, Redruth, Jan. 2.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgamated	109	£5 3 6	Wheal Basset	30	£12 8 0
ditto	107	4 17 6	South Frances	57	6 1 0
ditto	105	5 2 0	ditto	49	5 6 0
ditto	100	5 6 0	ditto	44	9 9 0
ditto	88	7 16 6	ditto	36	5 6 6
ditto	74	7 0 0	ditto	15	2 2 0
ditto	68	5 1 0	Wheal Seton	9	5 4 0
ditto	59	6 10 0	Pendarves	65	6 9 0
ditto	28	15 15 6	ditto	47	6 17 0
ditto	22	3 13 0	ditto	38	4 15 0
West Seton	94	8 8 0	ditto	20	12 19 6
ditto	59	8 5 6	East Pool	60	4 15 0
ditto	56	2 15 0	ditto	52	4 17 0
ditto	55	2 15 0	East Basset	47	4 17 0
ditto	52	8 8 0	ditto	30	4 11 0
ditto	45	7 18 0	ditto	26	9 3 6
ditto	44	4 13 0	Tolcarne	53	2 18 6
ditto	45	7 11 0	ditto	37	5 17 6
North Roskear.. [Enys	64	9 15 0	North Crofty	43	4 12 6
ditto	53	12 6 6	ditto	37	7 18 6
ditto	24	2 16 0	West Stray Park	56	7 17 0
Basset	40	4 6 6	Tresavean	55	1 19 6
Pendarves	37	3 8 6	Jackson's Ore	55	0 2 6
ditto	33	6 3 0	Wheal Uny	33	2 8 0
South Tolgus	74	5 6 6	ditto	16	7 10 0
ditto	71	8 13 6	Crane	28	7 16 0
ditto	58	4 7 6	Halse's Ore	9	0 0 6
ditto	47	13 15 6	ditto	8	0 0 6
Wheal Basset	82	5 13 6	Wheal Harriett	12	6 8 6
ditto	75	5 17 0	Wheal Kitty	9	8 14 6
ditto	45	11 15 6			

TOTAL PRODUCE.

Clifford Amalgam.	760	£4606 14 0	North Crofty	80	£ 492 2 0
West Seton	449	2912 10 6	West Stray Park	56	439 12 0
North Roskear	251	1847 2 0	Tresavean	55	108 12 6
South Tolgus	250	1911 3 0	Jackson's Ore	55	6 17 6
Wheal Basset	232	1802 19 6	Wheal Uny	49	199 4 0
South Frances	201	1243 11 0	Crane	28	218 8 0
Wheal Seton, &c.	179	1228 0 0	Halse's Ore	17	0 8 6
East Pool	112	537 4 0	Wheal Harriett	12	77 2 0
East Basset	103	603 0 0	Wheal Kitty	9	78 10 6
Tolcarne	90	372 8 0			

Average Standard ..... £128 1 0 | Average Produce 7
Average Price per ton ..... £ 6 6 0
Quantity of Ore ..... 2988 tons | Quantity of Fine Copper, 210 tons 2 cwts.
Amount of Money £18,685 9 0
LAST SALE.—Average Standard ..... £132 7 0.—Average Produce 6¾
Standard of corresponding sale last month, £136 2 0.—Produce, 6¼.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Vivian and Sons	293	£1687 9 0
Freeman and Co.	168	1233 10 0
Grenfell and Sons	484	3117 4 3
Sims, Willyams, and Co.	342½	2689 1 3
Williams, Foster, and Co.	410½	2957 6 6
Mason and Elkington	559	3668 7 0
F. Bankart	141½	684 0 0
Copper Miners' Company	209	1165 3 6
Charles Lambert	362½	1431 14 0
Sweetland and Co.	17½	51 13 6
Total	2988	£18,685 9 0

Copper ores for sale on Thursday next, at Tabb's Hotel, Redruth.—Mines and Parcels.—West Basset 490—East Carn Brea 345—Alfred Consols 286—Par Consols 264—Wheal Margery 232—Tolvadden 186—Copper Hill 131—North Basset 107—Wheal Buller 106—Wheal Agar 97—West Alfred Consols 92—East Rosewarne 82—South Crenver 62—West Treveiyan 36—Treffry's Regulus 21—Clijah and Wentworth 17—Rosewarne Consols 15—Wheal Union 13—Providence Mines 10.—Total, 2582 tons.

NO SALE on Thursday week, January 16.

FIRST SALE IN JANUARY.

Years.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake cop.
1852	2965	7¾	£16,139 11 0	£105 9 0	£70 2 0	£88 10
1853	3293	6⅞	22,290 12 0	147 18 0	105 4 0	102 10
1854	2926	6½	20,167 8 0	148 14 0	106 6 0	126 0
1855	2467	6⅞	16,564 7 0	137 11 0	97 12 0	126 0
1856	2566	7⅛	18,245 5 0	139 6 0	96 8 0	126 0
1857	2618	7¼	21,527 14 6	150 12 0	112 18 0	126 0
1858	3745	7⅛	22,417 1 6	123 3 0	84 8 0	107 10
1859	3554	7⅜	26,491 0 6	138 0 0	100 15 0	107 10
1860	3308	7½	26,608 0 0	143 14 0	107 1 0	117 0
1861	2602	7¾	18,115 11 6	133 15 0	95 17 0	102 10

The copper in the ore expresses the nett price per ton of copper paid to the miner.

PARTICULARS OF COPPER ORES SOLD IN CORNWALL IN THE QUARTER ENDING DEC. 31, 1861.

Copper ores, 48,493 tons (21 cwts.)—Fine copper, 2940 tons 3 cwts.—Amount of money, 265,514*l.* 9s.—Average produce, 6 1-16.—Average standard, 135*l.* 18s.—Average price (per 21 cwts.), 5*l.* 9s. 6d.

Copper Ores for sale at Swansea, Jan. 7.—Cobre 96, 95, 86, 69, 60, 59, 58, 5, 12, 92, 91, 90, 89, 75, 74, 51, 50, 48, 10—Wheal Maria 57, 40, 36—Ookip 44—Union ore 68, 63, 27, 27—Holyford 5, 1—Spanish 5, 1—Copper dross 1.—Total, 1585 tons.

Now ready, price 1s.,

THE PROGRESS OF MINING IN 1860,
BEING THE SEVENTEENTH ANNUAL REVIEW.
By J. Y. WATSON, F.G.S., Author of the *Compendium of British Mining* (published in 1843), *Gleanings among Mines and Miners*, &c.

The SIXTEENTH ANNUAL REVIEW OF MINING PROGRESS appeared in the MINING JOURNAL of December 31, 1859, and January 7, 1860.

A FEW COPIES of the REVIEW OF 1855, containing Statistics of the Metal Trade the Dividends and Percentage Paid by British and Foreign Mining Companies, and the State and Prospects of upwards of 200 Mines. Also a FEW COPIES of the REVIEW OF 1852, 1853, and 1854, MAY BE HAD on application at Messrs. WATSON and CUELL'S Mining offices, 1, St. Michael's-alley, Cornhill, London.

Also, STATISTICS OF THE MINING INTEREST. By W. H. CUELL.

WATSON AND CUELL'S MINING CIRCULAR, published every Thursday morning, price 6d. or £1 1s. per annum, contains Special Reports of Mines, and the Latest Intelligence from the Mining Districts, from an exclusive resident agent; also, Special Recommendations and Advice upon all subjects connected with Mining, and interesting to investors and speculators. A Record of Daily Transactions in the Share Market, Metal Sales, and General Share Lists, &c. Edited by J. Y. WATSON F.G.S., and published by WATSON and CUELL, 1, St. Michael's-alley, Cornhill.

N.B. Messrs. WATSON and CUELL have made a selection of a few dividend and progressive mines, which they have reason to believe will pay good interest, with a probability, also, of a rise in value, the names and particulars of which will be furnished on application.

INVESTMENTS IN BRITISH MINES.—Mr. MURCHISON'S REVIEW OF BRITISH MINING for the QUARTER ENDING 30TH MARCH, 1861, with Particulars of the Principal Dividend and Progressive Mines, Table of the Dividends Paid in the last Five Years, &c., is NOW READY.
Price One Shilling. At 117, Bishopsgate-street Within, London, E.C.
Reliable information and advice will at any time be given on application.
Also, COPIES of "BRITISH MINES CONSIDERED AS AN INVESTMENT." By J. H. MURCHISON, Esq., F.G.S., F.S.S. Pp. 356, boards, price 3s. 6d., by post 4s. See advertisement in another column.

Plates, 8vo., cloth, price 10s. 6d., by post 11s.,

THE MINERS' MANUAL OF ARITHMETIC AND SURVEYING,
By WILLIAM RICKARD,
Teacher of Practical Mining in the late Mining School of Cornwall, and Principal of the Engineering Academy, 4, Myrtle-street South, Liverpool.
Truro: Heard and Son.—London: Longman and Co.; the office of the *Mining Journal*, 26, Fleet-street; of the author, and of all booksellers.

THE MINING AND SMELTING MAGAZINE
No. I., for January, contains:—
1.—The History and Present Position of the British Coal Trade. By EDWARD HULL, B.A., F.G.S., of the Geological Survey, author of the "Coal Fields of Great Britain."
2.—Chapters on the Methods of Working and Ventilating Coal Mines. By MARK FRYAR, F.G.S., School of Mines, Glasgow.
3.—On the Processes of Separating Black Tin from Wolfram, at East Pool Mine, Illogan, Cornwall.
4.—Description of the New Form of "Fixed Frame" in use at Cook's Kitchen and other mines in West Cornwall.
5.—Hundt's Concave Circular Buddle. Illustrated by a lithographic plate.
6.—Mineral Statistics of India.
7.—The "Standards" of Tin Ore.
8.—List of Copper Smelters in England and Wales.
9.—Dr. Percy on the "Standard" of Copper Ore, and the Associated Copper Smelters.
10.—Reviews: Dr. PERCY'S "Metallurgy," Mr. WALLACE on "Mineral Deposits," and BRISTOW'S "Glossary of Mineralogy."
11.—The Government School of Mines, and Museum of Practical Geology—the Geological Survey.
12.—Mining, Quarrying, and Metallurgical Intelligence, including special information from various districts and mines, and five sections of Botallack Mine, East Carn Brea Mine, and Dale Mine. Abstracts of Mining Accounts and Meetings, Statistics of all Sales of Ore.
13.—Records of the Metal and Mining Share Markets, giving the fullest and most authentic information of all the movements of the month.
Eighty pages, demy 8vo. Illustrated by thirteen woodcuts, and a lithographic plate of Hundt's buddle. Price 1s.
Published at the office, 79, Old Broad-street. Sold by Simpkin, Marshall, and Co., Stationers' Hall-court; and at the *Mining Journal* office, 26, Fleet-street, London, E.C.
*** A single copy post free from the office for 13 postage stamps.

Price 6d., by post for seven postage stamps.

INDIAN GUARANTEES.
By the Editor of the "Limited Liability Journal."
Two articles which appeared in that paper. With an introduction added.
To be had at the office of the journal, 2, Royal Exchange; and of all booksellers.

Just published, in small 8vo., price 5s., bound in cloth,

HINTS TO MOTHERS ON HOME EDUCATION.
By FREDERICK BRIDGES,
Author of "Phrenology made Practical," &c.

Also lately issued, second edition, profusely illustrated, price 3s. 6d.,
PHRENOLOGY MADE PRACTICAL, AND POPULARLY EXPLAINED.
Mr. Bridges is a true Baconian philosopher; the very strongest antithesis to the scientific pretender. * * * We have no hesitation in recommending this treatise as the most reliable and perfect in any language on the subject of phrenology.—*Morning Herald.*
Mr Bridges is a master of the theory he undertakes to expound. * * * We have been interested in his book, which we commend to public notice, as presenting the latest views of phrenological science.—*Leader.*
London: George Philip and Son, 32, Fleet-street; and Caxton-buildings, Liverpool.

Now ready, large octavo, half bound, price 10s. 6d.,

BOOK-KEEPING FOR IRONWORKS:
A simple and complete system of double entry, expressly adapted for the iron trade, showing the method of ascertaining the cost per ton of the puddled bar and finished iron. By G. J. WILLIAMS, Accountant,
Eighteen years cashier and book-keeper in extensive works.
"A book which renders systematic book-keeping as simple as the writing of an invoice." London: *Mining Journal* office, 26, Fleet-street, London, E.C.

JOINT-STOCK COMPANIES PROMOTED: REPORTS, PROSPECTUSES, NEWSPAPER NOTICES, &c., PREPARED, and ADVERTISING ECONOMISED, by MR. LEE STEVENS, No. 36, CANNON STREET, LONDON, E.C.
MINING AND ENGINEERING CONTRACTS EFFECTED.

Notices to Correspondents.

PREPARATION OF ORES—PATENT LAWS.—Messrs. Smith and Wasley, in their letter in the Journal of Dec. 21, state that they are the original inventors of the machine for breaking stones; and, to use their own words—"Therefore, whatever is effectually working in or out of the city of Cork was taken from his (Mr. Smith's) invention." Now, it so happens that the patentee of the machine in this city for breaking stones never saw Messrs. Smith or Wasley in his life, and never heard of them until he saw a description of his own invention in the Journal; consequently he could not have copied an invention he never saw.—FAIR PLAY: *Cork.*

EAST CARN BREA.—I have bought East Carn Brea shares for investment, having been successful in East Caradon; and, for good or for evil, the credit is yours that I am in either.—W. G.

NANJILES MINE.—My attention having been called to a letter in the Journal of Dec. 21, respecting this mine, written by one who calls himself "A Shareholder," I beg to inform him if he had made the enquiry of me I should have been most happy to have given him all the information in my power; and if he called at our mine he could see a cross section of our shafts and lodes, which, I think, would convince him that we have erected our engine on the right shaft. The pitwork will be fixed in our perpendicular shaft, which is 60 fms. deep from surface. We have no doubt or misgiving about the matter.—JAMES ROWE, manager of Nanjiles Mine: *Jan.* 2.

CRICCETH SLATE COMPANY.—In reply to your correspondent, "S.," in last week's Journal, I beg to inform you that the rumour that this company is likely to be engaged in a law suit is utterly false, and devoid of truth.—ROBERT DOWN, Secretary.

CRICCETH SLATE COMPANY.—Will you kindly publish the enclosed reply of the secretary of this company to my enquiries concerning the law proceedings mentioned by your correspondent, "S.," in last week's Journal.—A SHAREHOLDER.

SIR,—The Cricceth Slate Company is in no way engaged in law; and I cannot at all understand how such a rumour could have been circulated, as nothing whatever has transpired to lead to such conclusions, and the reports constantly received from the quarry are exceedingly favourable.—ROBERT DOWN, Secretary.

GREAT RETALLACK.—In the Journal of Dec. 22, 1860, I notice a report from the agent of this mine which states—"There is nothing new since my last report; but in the adjoining mine they have cut a fine lode of blende, and two men have broken upwards of 20 tons of blende in three days. I mention this because the discovery is within 2 fms. of our boundary, and going into our sett very rich. This is about 19 or 20 fms. deep." Now, it is more than six months since I have seen any reference to the 20 fm. level in any of the reports, and I would ask the agent or committee what is doing in that level, or if it has been driven up to the boundary? If not, I cannot at all understand why it has not been done, seeing there is such a good lode in that direction, and the more especially now that the funds are low, and something yet being required for further development.—AN OLD SHAREHOLDER.

*** With the MINING JOURNAL of Dec. 7 we gave a SUPPLEMENT, which contains—Reviews of Dr. Percy's New Metallurgical Text-Book, and Mr. Smiles's "Lives of the Engineers"—also papers on Remarkable Mineral Deposit; Steam on Steep Roads—Important Improvements; Prosper United Mines; The Mining District in which East Wheal Seton is situated, with map; Improved Prospects of English Investments on the Continent; Furnaces; the Government Guarantee on Indian Railways; Economic Railway; Water Locomotion; Locomotion on Common Roads; Mining in Cumberland; Artificial Stone, and Preservation of Timber, &c.

*** With the MINING JOURNAL of Nov. 23 we gave a SUPPLEMENT, which contains—The School of Mines, Andersonian University, Glasgow; Miners' Association of Cornwall and Devon; Cornish Mining; Pyrites; Observations on the Coal Mines of Belgium—No. III.; Coals Classified; Great Tywarnhaile Mining Company; On the Internal Heat of the Earth; The Telegraph to India; A New American Gas Coal; Victor Emanuel Mine; St. John del Rey Mine; Steam-Engines and Boilers; Lanharry Hematite Iron Ore Company; Water as a Fuel; Letts's Diaries; &c.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, JANUARY 4, 1862.

The Government returns from the Board of Trade, with respect to the imports and exports of the United Kingdom for the 11 months of 1861, ending Nov. 30, have been issued. The total declared value of the exports of articles the produce and manufacture of this country is 115,355,004*l.* for the period mentioned in last year, against 123,714,276*l.* for the same months of 1860, and 119,613,185*l.* in 1859; being, consequently, a decrease of 8,359,272*l.*, as compared with 1860, and of 4,258,181*l.* as compared with 1859. These figures refer to enumerated and unenumerated articles collectively, whereas in unenumerated articles there is an increase in 1861 of 1,157,719 over 1860, and 1,628,740*l.* over 1859; but these facts necessarily render the decrease greater in enumerated articles when taken apart from the unenumerated. The total of the former in 1861 is 105,774,969*l.* against 115,291,960*l.* in 1860, and 111,661,890*l.* in 1859, consequently a deficiency of 9,516,991*l.* in the one case, and 5,886,921*l.* in the other.

Taking the exports of articles more particularly identified with mining enterprise, which are all enumerated, and given in detail in another column, we find there is a balance of 2,548,325*l.* less than in 1860, and which, against the above-stated deficiency of 9,516,991*l.*, is just about one-fourth of the whole, and which is the relative position which mining industry takes with respect to the general shipping trade of the country. The total for the eleven months of 1861 is 23,777,005*l.*, whereas the aggregate of 1860 was 26,325,330*l.* In coals and culm there is an increase of 261,939*l.*, and of 408,894*l.* in machinery, but in all other items there is a falling off, the heaviest being in iron, which is 1,415,437*l.* less than 1860; copper, 602,649*l.*; tin, 593,084*l.*; hardwares and cutlery, 238,991*l.*; steel, 227,262*l.*; lead, 103,448*l.*; and brass, 38,287*l.* under the respective totals of 1860.

The balance of trade in the precious metals is still against this country. The exports during the eleven months of 1861 amounted to 20,050,217*l.*, while the imports were 18,080,525*l.*, so that the difference on the wrong side is 1,969,692*l.* The exports consisted of 11,042,688*l.* in gold, and 9,007,529*l.* in silver; and the imports were 11,690,092*l.* in gold, and 6,390,433*l.* in silver, so that in the more valuable metal we received 647,404*l.* more than we shipped, but in silver we sent away 2,617,096*l.* more than was remitted to this country. The great drain of gold is to the United States, and of silver to Egypt, for India and China. To the former we forwarded 7,280,151*l.* in gold and 76,943*l.* in silver; together, 7,357,094*l.*, and received only 27,898*l.* in gold and 28,249*l.* in silver; together, 56,147*l.*, being 7,290,947*l.* against ourselves. To Egypt we shipped 715,755*l.* in gold, and 6,854,154*l.* in silver; together, 7,569,909*l.*, against 11,759*l.* gold, and 2496*l.* silver, received; together, 14,255*l.*, so that in this respect we were losers to the extent of 7,555,654*l.* To France we transmitted 992,270*l.* in gold, and 1,031,553*l.* in silver, together, 2,023,823*l.*; and received 2,502,326*l.* in gold, and 636,530*l.* in silver; together, 3,138,856*l.*, making a balance of 1,115,033*l.* in our favour. From Russia we obtained 557,353*l.*, all gold, without remitting thereto; and from Australia and Mexico we were recipients, on similar terms, to the extent of 6,002,123*l.* in gold, and 603*l.* in silver, from our Australasian colonies; and 1,520,917*l.* in gold, and 5,009,839*l.* in silver, from Mexico. To the Brazils we sent 20,064*l.* in gold, and 139,145*l.* in silver; together, 159.209*l.*, without receiving any remittance in the precious metals; and to British North America we shipped 596,552*l.* in gold, and 76,943*l.* in silver; together, 602,159*l.* on similar terms.

There were 45,662 vessels employed in the export trade of the country during the eleven months mentioned, with a collective burthen of 10,576,471 tons. Of the vessels, 5320 were dispatched to British possessions, and 40,342 to foreign countries; but there were 24,862 British and 20,800 foreign vessels in the total of 45,662. The principal foreign vesssels were—4708 French, of 450,483 tons; 3068 Danish, of 300,045 tons; 1841 Norwegian, of 298,210 tons; 1656 Hanoverian, of 130,905 tons; 1589 Dutch, of 206,009 tons; 1607 Prussian, of 363,383 tons; and 1482 United States of America, with a collective burthen of 1,285,079 tons.

During the past month an active correspondence on the subject of dues, and the accommodation for the coal trade at Birkenhead, has been going on between the representatives of those shipping coal at that port and the Mersey Harbour Board, the result being, as we stated in last week's Journal, in favour of the shippers. It has been decided to charge 2d. per ton for the use of the coal-tips, to permit the use of the low level free, and to charge ½d. per ton for weighing at either place. Mr. W. LAIRD, to whom the correspondence on behalf of the coal trade has been entrusted, has, no doubt, conducted it most ably; but this is not all, he has, by publishing the whole of the correspondence which has passed, together with a list of dock and town dues levied upon the exportation of various articles, afforded an opportunity to shippers generally to learn how very unequally the tax is levied, varying, as it does, from 3½d. per cent. for tin, to 95s. 3d. per cent. upon paving stones, there being apparently no fixed basis whatever for the levying of the tax. We extract the subjoined from Mr. LAIRD'S table, showing the amount per ton and the percentage of value levied upon the several articles identified with the mining and metallurgical industries:—

	Dues per ton.	Value per ton.	Percentage.
Alum rock	4d.	£7	4s. 9·14d. to —
Black jack zinc	1d.	£3	2s. 9·33d. „ —
Brass (old)	6d.	£56 to £75	0s. 8·00d. „ 0s. 10·71d.
Brimstone	6d.	£7 to £8	6s 3·00d. „ 7s. 1·71d.
Calaminaris	2d.	£10	1s. 8·00d. „ —
Pipe-clay	2d.	30s.	1s. 11s. 1·33d. „ —
China stone	3d.	40s.	12s. 6·00d. „ —
Fire-brick	3d.	12s. 6d.	4·0s. 0·00d. „ —
Copper regulus	6d.	£45	1s. 1·33d. „ —
Old copper	6d.	£80 to £90	0s. 6·66d. „ 0s. 7·50d.
Copper ore	2d.	£6 to £8	20s. 0·00d. „ 33s. 4·00d.
Fullers' earth	4d.	£3	1s. 1·33d. „ —
Felspar	2d.	20s.	16s. 8·00d. „ —
Flagstones & grinding stones	3d.	£3 to £5	5s. 0·00d. „ 8s. 4·00d.
Kentledge	2d.	£3 to £3 5s.	5s. 1·54d. „ 5s. 6·66d.
Iron ore	2d.	15s. to 20s.	16s. 8·00d. „ 22s. 2·66d.
Lead and lead ore	8d.	£17 to £20	3s. 4·00d. „ 3s. 11·06d.
Lime (loose)	1d.	15s.	11s. 1·33d. „ —
Limestones	1d.	17s.	9s. 9·65d. „ —
Manganese	4d.	£3 to £6 10s.	5s. 1·54d. „ 11s. 1·33d.
Marbles	4d.	£4 to £20	1s. 8·00d. „ 8s. 4·00d.
Ores (unenumerated)	2d.	—	— —
Paving stones	4d.	7s.	95s. 2·86d. „ —
Rock salt	3d. ..	10s. to 14s.	35s. 8·57d. „ 50s. 0·00d.
White salt	4d. ..		47s. 7·43d. „ 66s. 8·00d.
Silver ore	8d.	£20 and upwards.	3s. 4·00d. „ —
Slate and slate slabs	2d.	£1 to £4	4s. 2·00d. „ 16s. 8·00d.
Spelter	8d.	£18	3s. 8·44d. „ —
Steel	6d.	£15	3s. 4·00d. „ —
Tin ore	8d.	£60 to £72	0s. 11·11d. „ 1s. 1·33d.
Tin	4d.	£119 to £121	0s. 3·31d. „ 0s. 3·37d.
Turf	2d.	8s. to 12s.	27s. 9·33d. „ 41s. 8·00d.
Zinc	8d.	£20 to £25	2s. 8·00d. „ 3s. 4·00d.
Coal	3¼d. ..	10s. 6d.	5·1s. 7·05d. „ —

The prejudicial result of the exclusive system of legislation pursued by the Northern States, and of the Morrill Tariff, cannot be better exemplified than by a reference to the position of the export trade during the past year, as shown by the Board of Trade Returns, so far as they have yet been published. The diminution in the value of the articles exported to America alone is more than sufficient to account for the entire deficiency; and this diminution is entirely attributable to the disturbed state of affairs in that country. One principal cause of the secession movement has undoubtedly been the impediment put upon trade by the passing by the Northern States of the Morrill Tariff, by which it was proposed to protect the manufacturers of the North by import duties, regardless of the interest of the South. These duties were equal in many cases to 30 per cent.; and, though they are, no doubt, particularly oppressive to the South, it cannot be denied they have been seriously detrimental to American commerce generally. It was, probably, from these circumstances that the opinion obtained that the discontent between the manufacturing and non-manufacturing States arose, more with respect of matters of commercial policy than of the question of slavery, upon which the dispute was supposed to turn. The diminution in hardware and cutlery, iron and steel, alone reaches 2,512,568*l.* during the first 11 months of 1860 and 1861, being respectively:—

	1860.	1861.
Iron, all kinds	£2,207,897	£598,800
Steel, unwrought	577,437	274,765
Hardware and cutlery	1,194,367	593,568
	£3,979,701	£1,467,133

From this it will be seen that the decrease has been equal to upwards of 60 per cent., so that war with the Northern States can scarcely be looked upon as likely to produce more injury than the continuance of the present state of affairs will inflict. It should be recollected, moreover, that if the Southern Confederation be recognised there will be opened up a large field requiring British manufactures, presided over by statesmen who have ever shown themselves inclined rather to encourage commerce than otherwise; whilst the North persevere in their policy, not only of excluding our shipping from its coasting trade, but also of refusing to give us facilities with regard to freedom of navigation, which they have so long enjoyed at our hands.

NEW DISCOVERY OF COAL IN SCOTLAND.—At Newbattle Abbey Colliery, a fine seam of parrot coal has recently been cut, at a depth of 297 yards, and from the report and analyses of Dr. Stevenson Macadam, it seems probable that the proprietor, the Marquis of Lothian, will be amply recompensed for the time and money he has expended in developing the property. In sinking several good seams have been laid open, but the parrot and the splint, which is a good steam coal, are those to which most importance is attached. Dr. Stevenson Macadam, who enjoys a high reputation as an analyst, reports that the parrot coal yields 57 per cent. of volatile combustible matter, and 43 per cent. of coke. Each ton producing 12,573 cubic feet of gas; 1146 2-3d lbs. of coke, and 45 gallons of tar and ammoniacal liquor. Generally, he says, the parrot coal from Newbattle engine-pit is a first-class gas coal, and he is of opinion that the large quantity of gas evolved from 1 ton, and the rich quality of the gas, will commend the use of this coal wherever superior gas is required. As an oil-producing coal the Newbattle parrot is second only to the Boghead; for, although Capeldrae and Auchenheath yield more crude oil per ton, the greater purity of the Newbattle oil gives it the advantage. The quantity of refined oil obtainable from 100 gallons of crude oil from the several coals is—Boghead, 64 gallons; Newbattle, 55½; Capeldrae, 47½; Methil Black, 46 2-3d; Wemyss, 44½; Methil Brown, 40; and Auchenheath, 40 gallons. The specific gravity of the oil from Newbattle coal is ·865, water being 1000.

GRAND DISCOVERY OF A NINE-FEET HOUSE AND STEAM COAL IN SOUTH WALES.—This vein was worked extensively about 35 years ago by Mr. Nash Vaughan Edwards, of Rheola, and on whose land the discovery has been made. About 26 years ago it was lost through a fault which ran through the property in an east and west direction; and afterwards thousands of pounds were spent from time to time in looking for it by different companies, all of whom proved unsuccessful; and most of the professional men of the country came to the conclusion that it was a piece of another vein above it, of 4 ft. 6 in. thick, which had been thrown down by a fault, and in the throw had increased in thickness to 9 feet, and that there was no more of it in existence. About eight months ago, however, a gentleman named Mr. John Fraser, from North Wales, came to the neighbourhood in search for coal, and after a most diligent application, and also making enquiries from old colliers of the place, he determined to make another trial more to the south than any that had been made before, and went down with a pit 42 yards in depth, and, to the great astonishment of the country in general, succeeded to gain the Big Bettws 9-ft. coal. On the south side of the fault, where it was lost in former days, a trial was made between the Bettws 9-ft. coal, and the best first-class Newcastle steam-coal, and the result was a saving in favour of Bettws of 16 per cent. against the best Newcastle coal. It is of a hard nature, fully 9 ft. thick, proved under nearly 500 acres of land, and stands in a very convenient place for both railway and shipping. Great joy is naturally felt through the country, as it will increase the richness of this wealthy part of the world.

HETTON COLLIERY—LECTURE ON GEOLOGY.—Prof. J. Morris, F.G.S., who has recently given a course of lectures on some of the leading facts and phenomena of geological science to the Literary and Philosophical Society of Newcastle, kindly delivered a lecture on Geology, with more special reference to the coal-bearing formations, in the National School-room, Hetton-le-Hole. The Professor gave a general outline of the rocks composing the earth's crust, the manner of their deposition, and the changes they have since undergone. Having pointed out generally that rocks are either of igneous or aqueous origin, he proceeded to enlarge at some length on those of the latter class, showing their distribution, how they were gradually formed, and noticing some of the more remarkable fossil remains found in them, which afford evidence that a large portion of the stratified rocks were accumulated beneath the sea, and that each successive deposit was marked by different forms of animal life. The characteristics of the Fauna and Flora of the coal measures were specially alluded to, and specimens of fossil plants, obtained from the colliery by Mr. Daglish, were exhibited in illustration of the subject; and allusion was also made to upright stems of *sigillaria*, standing upon one of the coal seams in the same pit, as indicating the place where they once grew. The lecturer further dwelt upon the probable origin of coal, and the alternating beds of sandstone and shale, the latter frequently containing numerous remains of plants, as ferns, others allied to the club-moss tribe (Lepidodendron), and also other peculiar forms, as *calamites* and *sigillaria*, the root of which (stigmaria) is found in the fire-clay or floor below the coal. In conclusion, the Professor addressed some pointed remarks upon the advantage to science which would accrue if those who, like many present, had such ample opportunities of collecting geological facts from the best sources, carefully observed and recorded the data, so as to be available for others, who had not equal facility for studying them; a mass of information would thus be obtained, which would be of practical value to the geologist. Among an attentive audience were many of the underground agents and workmen of the Hetton Collieries, and Messrs. Dickinson and Atkinson, Her Majesty's Inspectors of Mines for Lancashire and Durham, Colonel Parkinson, Rev. Mr. Dodgshon, Lindsay Wood, B. T. Matthews, John Daglish, George Johnson, Esqrs., &c. At the close of the lecture a most cordial vote of thanks, on the motion of Mr. Dickinson, was passed to the learned lecturer, and also to the Rev. J. S. Nichol, rector of Hetton-le-Hole, as Chairman. It is rarely that those connected with the working of mines have so excellent an opportunity of acquiring a sound knowledge of those substances amidst which so large a portion of their lives is passed, and that from so recognised an authority as Professor Morris.

ON THE THEORY OF STEAM AND OTHER HEAT ENGINES.—At the Civil and Mechanical Engineers' Society (Mr. Charles B. King, M.E., in the chair), a paper was read on this subject by Mr. Francis Campin, C.E., the President.—The author commenced by calling attention to the small progress which had been made during the last half-century in the improvement of the steam-engine, with respect to economy of action, in comparison with what might reasonably be expected from the rapid strides of physical science, and he stated that the object of the present paper was to raise a discussion upon the generally accepted theory of thermo-dynamics, which did not appear to him to furnish means for explaining satisfactorily the conversion of heat into motion. If 1 lb. of water be subjected to the action of heat until its temperature is raised 1° then will the heat consumed be equal to 772 ft.-lbs., according to the theory of Dr. Joule. Calculating upon this datum, the efficiency of the best steam-engine will not exceed one-ninth. It is very important to determine the cause of this low efficiency, whether it be in the medium employed, or in the mechanical arrangements, or whether the theory itself be erroneous. It is necessary to mention circumstances attendant upon the production of motion due to the disappearance of heat, and most important to determine whether heat is annihilated or not. If a cubic foot of water be evaporated against the constant resistance of the atmosphere, about 3,454,000 ft.-lbs. of work will be performed with the disappearance of 62,500 units of heat; but this is not the greatest amount of work to be got out of that quantity of heat. Let the water be confined until the whole of the 62,500 units of heat is communicated to it; then allow the steam to expand against a resistance varying from the greatest pressure (24,000 lb. per inch) down to the ordinary atmospheric pressure, and about 2,600,000,000 ft.-lbs. of work will be performed, if no heat disappears except that which becomes latent, and which may afterwards be obtained by condensation; and this quantity of work is much in excess of what should be obtained, according to Dr. Joule's equivalent. The foregoing results appear to indicate the inefficiency of Joule's formula, and the calculations seem accurate, as we find that we can, by pursuing a similar course, calculate the amount of work performed by any steam-engine, without any considerable error accruing. If a quantity of heat proportional to the work done be actually destroyed, either the temperature of the whole bulk of steam in the cylinder must be thereby reduced, or a portion of the steam must be condensed; in which case it is not easy to explain the *modus operandi* of the steam in producing motion, nor does it appear that actual proof of such destruction of heat exists. The conclusions arrived at are, therefore, that work is obtained by absorption of heat by the expanding steam, and that the heat may be recovered by condensation. The author next proceeded to explain the advantages accompanying the employment of high-pressure steam with a considerable degree of expansion, and to show that the experiments of Stimers and Isherwood upon the practical value of expansion were useless, and applied only to the circumstances under which they were performed. In the opinions expressed in the foregoing words, the author was supported by the researches of Seguin, and they were also identica

with those expressed in Joseph Gill's "Essay on Thermo-Dynamics," published by Weale. The relative efficiency of the steam-engine and the various descriptions of air-engines was then entered upon, the result showing that generally air-engines did not exhibit the high degree of economy commonly supposed to exist, and that an engine by Siemens was the only one showing the marked superiority over the steam-engine. In conclusion, the author said he did not wish to see any of the remarks he had made accepted without discussion, but he merely desired to see the truth arrived at upon this most important subject, and that if any adequate discussion should be brought about by the paper, whether his views were confirmed or refuted, he would feel amply repaid for his labour in bringing the subject before the society. He then returned cordial thanks to Messrs. J. Braithwaite, C. W. Siemens, E. E. Allen, and others who had supplied him with information. A discussion followed the reading of the paper, in which the Chairman, Mr. Richard Howson, Mr. E. Field, Mr. C. G. Gumpel, Mr. Wellington Lee, of the U.S., Mr. Francis Campin, and others took part. At the conclusion of the meeting, Mr. Howson exhibited and explained his patent long tube barometer, the principle of which consists in the employment of a hanging cistern, carrying a closed glass tube, which occupies the centre of the column of mercury, so that the atmosphere acts upon the bottom of the hanging cistern. Let us suppose the area of the cistern to be one square inch, then, if the pressure of the atmosphere increases one inch, one cubic inch of mercury will be forced up into the barometer-tube, occupying the space included between that and the internal tube attached to the cistern; hence it is evident that the height of the additional portion of mercury thus forced into the tube may be much in excess of one inch, allowing the scale to be elongated so as to show more minute changes of pressure, consequent to meteorological changes. The advantages of this barometer over those ordinarily used are so obvious that any further remark is rendered superfluous.

VENTILATION OF MINES.

At a meeting of the Manchester Geological Society, on Tuesday last (Mr. JOSEPH DICKINSON, President, in the chair), Mr. JOSEPH GOODWIN read the following paper:—

In resuming the subject of my paper, permit me to observe that it is one that all who are desirous of forwarding the interest of practical mining must necessarily take a deep interest in, and alike feel the necessity of employing the best means in their power to arrest the evils arising from deficient ventilation. So far a unanimous feeling appears to exist, but as to the best manner of dealing with the subject great diversity of opinion is to be found. It may be considered that the manner of dealing with the subject I have chosen is somewhat peculiar, and that it is not the best course that might have been adopted. However, I beg to assure every gentleman present that after very carefully weighing over the subject in all its bearings, and taking the views of some of the most extensive and highly respectable proprietors of mines in this country, I have been compelled by force of conviction to adopt the course I have chosen, in the earnest hope of rendering some permanent good to the mining world. I have allowed neither interested nor vindictive motives to influence or guide me in anything I have either said or written upon the subject, and sincely hope that if, on the other hand, any opposition may be raised to my views the same motive—that of forwarding the interest of practical mining—may influence those who choose to differ with me, and whose right to do so I do not dispute. In dealing with any other subject that happened to be as far from perfect as the colliery management of this country, it is questionable whether there be one present that would not enquire into the causes of its imperfections, and at once direct their attention to the removal of them. Why should we make this an exception? We may deal with the subject in an abstract manner from now to doomsday without producing the required effect; but if we trace out the evils, and use our powers in endeavouring to remove them, we may reasonably hope for improvements that will exercise a beneficial effect upon all connected with mining whether in a direct or indirect manner. How can a physician successfully treat a disease without first knowing its source? On the same grounds, how can we expect to administer relief, and check the feeling that is daily growing stronger—that all is not being done in the mining world that might be to arrest the tide of disasters that continues to flow with unabated effect? Surely not by being afraid of free enquiry into the causes that produce the evils we are all alike desirous of removing.

It must be admitted by all who have carefully considered the subject, and weighed over the evidence adduced at the respective enquiries, that it is not new principles that are required to prevent the loss of life taking place year by year in working the coal mines of this country, but by attention being paid to the simplest, oldest, and most commonplace precautionary measures. Nor are the evils arising from explosions the only ones we have to guard against; it is alike our duty to pay every attention to the sanitary state of the mines under our respective charges, and to remove as far as is practicable all the causes that are either life-destroying, or injure the health of those whose duties call them to spend a great proportion of their time underground. It requires no argument to prove that a workman is unable to perform the same amount of labour when working in vitiated air as when working in good air, and that much of the pecuniary loss thus sustained falls either directly or indirectly upon the employer. The ever-varying circumstances of a mine, and the still greater difference between one mine and another, precludes us from the possibility of determining what are the maximum and minimum quantities of air required for each specified area, or for each workman employed. It is true that anyone understanding the mechanical laws of elastic fluids may determine with tolerable accuracy the loss sustained by passing a current of air through a mine, and what power would be requisite to put into circulation a given quantity of air under known circumstances. But the quantity of air necessary to ventilate a colliery, so as to render it safe and healthy, can only be determined by actual observations as the workings proceed. It is well to be prepared for emergencies by having more air at command than the immediate wants of a mine require, until the narrow work of a mine be fully opened out, and opportunity afforded for the gases to drain from the coal and strata through which the narrow work has been driven.

It may be asked how it can be ascertained when the quantity of air is insufficient to render a mine safe and healthy. If so, my reply is that an ordinary person, possessed of the senses with which nature has endowed him, can find no difficulty in satisfying himself upon this point, and that those who are unable to do so ought not to be entrusted with the management of a colliery for a single day. If the means of satisfying ourselves whether a mine be effectually ventilated or not be as simple and unmistakable as I contend they are, what excuse can be offered by those who continue to direct operations when the safety of the mine and the lives of the workmen depend upon circumstances over which the manager can exercise but a very limited control? We need not retrace our steps very far in reviewing the casualities of the mine to find indubitable proof of the fatal consequences arising from having more workings open at once than the air at command could effectually ventilate. It has been stated that every coal mine ought to be ventilated as though it were an ascertained fact that large volumes of gas would be constantly emitted therefrom. If by this it is implied that all coal mines ought to have currents of air passing the working faces of each workman, and that such air currents be conducted in the most direct manner the requirements of the mine will permit of through the maximum sized air-courses, and at as high a velocity as it is practicable for the workmen to work in, I perfectly agree that all coal mines ought to be so ventilated. But if more then this be implied, I candidly confess that I do not know what is meant.

With regard to the phenomenon of sudden outbursts of gas, I can only speak so far as my own experience will permit me, and as yet I have seen nothing that ought to be designated by such a term. I have seen on different occasions free escapes of gas that might by some have been called "sudden outbursts," Since our last meeting I have seen 54 cubic yards of fire-damp accumulate in a far less number of minutes, and the quantity issuing from one blower was sufficient to keep up a light equal at least to twenty common gas-burners. But when a proper current of air was directed upon it that portion of the mine was rendered as safe as any other. The only real danger that I can conceive to arise from such escapes of gas beyond the ordinary risk of working fiery seams is by the atmosphere of the mine being allowed to become so vitiated as to be almost at explosive point throughout the mine, and requiring only the smallest extra quantity of gas to be given off to render it so. The only means of guarding against this state of things that I am acquainted with is by regulating the extent of the workings by the quantity of air at command, and the gas given off, and avoiding having more workings open than can be effectually ventilated. The yield of fire-damp is influenced to some extent by the atmospheric pressure, but probably not to the extent that is generally supposed, but at present much remains to be learned upon this subject, and too much attention cannot be paid to the elucidation of it by those who have collected data, or made observations of the effect produced by changes in the atmospheric pressure. It is generally supposed that under all circumstances a fall of the barometer is synonymous with a free escape of gas in fiery seams—or, in other words, the fire-damp previously pent up by an increased atmospheric pressure, whether in the goaf or in the interstices of the coal, is allowed to escape more freely in the latter case, and in the former the body of fire-damp to approach nearer to the edge of the goaf that the current of air impringes upon. In consequence of the means of detecting the presence of fire-damp not being delicate or sensitive enough to admit of a satisfactory conclusion being arrived at, I am unable to say whether any exception applies to the rule laid down, that fire-damp oozes more freely out of the interstices of the coal when a reduction of atmospheric pressure takes place. But after carefully noting the effect produced on fire-damp in the goaf and other places by a rise or fall of the barometer on more than a hundred different occasions, I am compelled to acknowledge that I see no rule that will not admit of many exceptions. In one instance with the wind from S.S.W., and the barometer at 29·070°, and the theromometer at 53°, I found that the inflamable gas had approached 14 feet nearer to the edge of the goaf that the air current impringed upon, than when the barometer had stood at 30·467°, and the thermometer at 51°, with the wind almost due south; the same quantity of air was passing on each occasion, as near as could be ascertained by measurement, and the workings and goaf precisely the same. While in other instances I have not found the slightest possible difference in the approach of fire-damp from the old workings when the barometer has fallen more than an inch, and in a few instances I have found it to retreat into the old workings when the barometer has been steadily falling. It is of importance that as much should be known upon this particular subject as can be, and I beg to suggest that some of our friends who may be better qualified than myself, and who have opportunity, will direct their attention to the elucidation of it. The velocity at which air currents can be practically passed through the workings of a mine, and the loss sustained by passing them through, are subjects connected with the ventilation of mines that cannot too often be pressed upon the attention of all connected with practical mining.

The highest velocity that I find it convenient to pass currents of air past the working faces of a mine is two miles per hour, or 2·93 ft. per second, and even this is too high a velocity, unless in exceptional cases where much gas is given off in newly-opened seams. It is practicable to maintain a much higher velocity in air-courses where the workmen are not exposed, but high velocities are always attended with much loss of power, the rule being that the drag or resistance is as the square of the velocity of the current, so that if the velocity be 3 ft. per second in one case, and 7 ft. per second in another, the drag or resistance would be in proportion as 9 is to 40. However, this rule is subject to be changed by such a variety of circumstances, that in almost every case I have tried to test the accuracy of it the results have been somewhat different; but, perhaps, it may be correct enough for practical purposes. In order to keep the velocity of the air currents of a mine as low as possible, and at the same time maintain the mine in a perfect state of ventilation, it is necessary to increase the size of the air-courses to the greatest extent that the nature of the roof and other circumstances will permit of, or to adopt the principle of having parallel air-courses for the intake and out-going currents of air. The latter system entails a considerable expense in driving extra air-courses, and having to maintain them in order, especially in some of the mines in the South Lancashire coal field. I consider it highly desirable that all air-courses should be used as waggon-roads where practicable, so as to ensure them being regularly travelled, and maintained something like a proper size. I again repeat that I know of no single circumstance connected with the ventilation of mines productive of greater mischief than the subject under consideration. The advantage gained by increasing the size of air-courses, or driving parallel ones, is that of allowing an additional quantity of air to pass through in nearly an arithmetical proportion to the increase of the area through which the air passes.

It is of importance in the ventilation of mines that the principal air currents be conducted through a mine in the most direct manner that the requirements of it will permit of, as much loss of power is experienced by conducting currents of air long distances through the air-courses of a mine; the rule being that in air-courses of equal section the volumes of air passing through them are proportional to the square root of their lengths, so that if we had two air-courses of equal area, and one was 100 yards long and the other 1000 yards, the quantity of air passing through them, all other circumstances remaining the same, would bear the proportion as 10 does to 31·622. So that if this principle be correct, something less than a third of the quantity of air could only be got through the long air-course as through the short one. In some cases where the workings are very extensive, it is not practicable to reduce the length of air currents below three or four miles. In other instances advantage is not taken of the opportunity that presents itself to reduce the length currents of air are often dragged through a mine; in either case it is not difficult to see the great loss of power that is thus sustained. I have seen collieries, said to be well managed, where the principles of ventilation have been so far neglected as to have the air currents double the length that there was any necessity for their being.

It is possible that I may again be taunted with having given nothing new; very probably I may not have done, but allow me to say that all the practical principles of ventilation with which we are at present acquainted have been known for a considerable time past to a few, but almost every day occurrences prove that many colliery managers either do not understand the principles of ventilation, or that they grossly violate them. One very important law in determining the correct principles of ventilation, known by the name of Boyle and Marriott's, was discovered by Boyle more than 200 years ago, and as 50 years subsequent to that period confirmed by Marriott. Shall we disavow the principles laid down by those eminent men, and cease to act upon them, because they are not of modern discovery? Or shall we discontinue the use of that invaluable instrument the Davy lamp, because it was discovered some 46 years ago? Nay, have not two-thirds of the great principles that we are indebted to for our civilisation and greatness as a nation been known to the ancients, and lost in the records of time? My object is not, as I have repeatedly stated, that of bringing forward some chimerical and impracticable scheme, but to impress upon the minds of all, whether they be possessed of those rare attainments that some present can boast of or not, that, however, much they may know, in colliery management success must depend upon reducing to practice the principles with which we are at present acquainted; and by the manager, whomsoever he may be, or by what title he may be known, seeing that those principles are not violated with impunity. It is necessary that strict discipline be maintained in a mine; but, for my own part, I have never found it necessary to maintain a discipline bordering upon that exercised in our goals in order to carry out the regulations of a mine. It, however, may be necessary in some isolated case, where factory operatives, day labourers, and others are converted into colliers as it were by magic spell, and entrusted and compelled to work with a Davy lamp, without any preparatory training in the use of so delicate an instrument.

Mr. Geo. Charlton read a paper on the Self-extinguishing and Detector Safety-Lamp for Working Miners. Considerable discussion followed the reading of each paper—the particulars of which we shall give in an early Journal. Some interesting geological specimens were presented by Mr. George Wareing Ormerod, of Chagford, Devonshire, and by Mr. J. Yates, of Lauderdale. The thanks of the Society were accorded to Mr. Goodwin, Mr. Yates, and Mr. Ormerod.

LIGHTING MINES WITH GAS.

The advantages derivable from the introduction of gas lighting into mines has been pointed out by various correspondents of the *Mining Journal*, but hitherto, owing to the supposed difficulty in its practical application, comparatively few mines have adopted the improvement, though it cannot be doubted that the economy would be immense. Mr. George Bower, of St. Neots, Huntingdon, however, has removed all doubts upon the subject, having lighted three of the Staveley Collieries, and given the greatest satisfaction to the proprietors. These pits are of considerable depth, and it has been found that the only power required to take the gas down is a small jet of water falling through the pipe with the gas. If even the offices at the top of the mine, the pit, and the main galleries were lighted, it would very materially reduce the candle bill, while if the gas were made from a rich Cannel the tar produced is of a very oily nature, and could be used as a lubricator for rough purposes when mixed with a little lime. Recently Mr. Bower has been engaged in lighting with gas, for the Italian Government, the tunnel now being formed under Mount Cenis, so that whether the mines to be lighted be simply day level mines or deep ones, his system of supplying them with gas is proved to be equally available.

In Mr. Bower's apparatus, the hydraulic main, condensor, and purifier are combined in one arrangement, thereby insuring a compactness and simplicity unattainable by the disconnected system. By this means one vessel takes the place of three or four. Mr. Bower contends that coal alone is the best material for producing artificial light, and states that he is confirmed in this conclusion, after having carefully experimented upon gas making for upwards of eight years, during which period he has tried almost every possible plan of producing it. With these views we perfectly agree, provided the gas is to be manufactured in the vicinity of coal fields, but we believe there are instances in which it is not desirable to manufacture direct from the coal, and that in all cases where the gas has to be made from a material obtained from a distance, the hydro-carbon fluid used by Mr. Leslie, of Conduit-street, is preferable, inasmuch as from the large quantity of gas produced from each gallon of the fluid, and the small cost at which it can be produced, would reduce the cost of the gas very considerably; the cost of transporting the material for the production of a given quantity of gas would be much lower, and there would be less trouble in stowing it when at the place of consumption. No doubt Mr. Bower's apparatus would be equally effective in producing gas from Mr. Leslie's hydro-carbons, so that the substitution of one material for the other could not interfere with the increased development of his invention.

Mr. Bower gives the subjoined estimate of the comparative cost of lighting with gas and with candles, the calculation being based upon the requirement of a mine consuming in the offices, shaft, and *main* workings 50 lbs. of candles per day of 24 hours, value 30s. The cost of manufacturing sufficient gas to give about double the light of 50 lbs. of candles per day would be:—Fuel per day to heat the retort, 2 cwts., 3s.; rich Cannel coal 1¼ cwt., 3s. 9d.; labour of a lad one day, 2s.; wear and tear of retort and plant, 9d.; cost of purification, 2d.; interest of capital expended, 1s. 8d.; reproduction of capital by compound interest 36*l*. 10s. yearly, or per diem, 2s. = 13s. 4d., which shows a saving of 16s. 8d. per day. The capital required would be:—For one mile of pipe of various sizes, and for gas-fittings, labour, &c., 350*l*.; for a suitable sized gas apparatus fixed, 150*l*.; suitable buildings for ditto, 100*l*.=600*l*.

STATISTICS OF THE SCOTCH IRON TRADE.

PIG-IRON WORKS IN SCOTLAND.

Works.	Proprietors.	Furnaces. In.	Out.	Tot.
Gartsherrie	Messrs. W. Baird and Co.	13	3	16
Eglinton	Ditto	8	—	8
Blair	Ditto	4	1	5
Lugar	Ditto	—	4	4
Muirkirk	Ditto	3	—	3
Glengarnock	Merry & Cunninghame	8	1	9
Ardeer	Ditto	4	0	4
Carnbroe	Ditto	4	2	6
Coltness	Coltness Iron Company	9	0	9
Dalmellington	Dalmellington Iron Co.	4	1	5
Monkland	Monkland Iron & Steel Co.	8	1	9
Langloan	Robert Addie, Esq.	6	—	6
Summerlee	Wilsons and Co.	8	—	8
Dundyvan	John Wilson's trustees	3	5	8
Clyde and Quarter	Colin Dunlop and Co.	7	2	9
Govan	Wm. Dixon, Esq.	3	2	5
Calder	Ditto	6	2	8
Omoa	Robert Stewart, Esq.	2	2	4
Shotts	Shotts Iron Company	3	2	5
Castlehill	Ditto	0	3	3
Wishaw	Robert Bell, Esq.	—	3	3
Portland	Portland Iron Company	4	1	5
Kinneil	Wm. Wilson and Co.	4	1	5
Forth	Forth Iron Company	4	3	7
Lochgelly	Lochgelly Iron Company	—	4	4
Lumphinnans	A. Christie and Co.	—	1	1
Carron	Carron Iron Company	4	—	4
Devon	Alloa Coal Company	—	3	3
Almond	Jas. Russel and Son	2	1	3
Gladsmuir	C. and A. Christie	—	1	1
Garscube	....	—	2	2
Nithsdale	....	—	3	3
	Total	121	53	174

ASSOCIATION FOR THE PREVENTION OF STEAM-BOILER EXPLOSIONS.—At the monthly meeting of the executive committee, on Tuesday (Mr. Hugh Mason, Vice-President, in the chair), Mr. Fletcher, chief engineer, presented his monthly report, from which the following are extracts:—"No explosion has happened to any boiler under the inspection of this association in the past month, nor, in fact, throughout the whole year. A few cases of injury to furnaces have occurred, arising from deficiency of water, consequent on the derangement of the glass water-gauges, which would have been prevented had there been two gauges to each boiler, so frequently recommended. In another case, injury arose from the attendant lighting a fire in his boiler when empty, while, in another, from a defective blow-out tap. There has, however, come to my knowledge, in a casual way, the occurrence, in various parts of the kingdom during the past year, of no less than 20 explosions, from which 27 persons have been killed and 47 wounded, the boilers in question being of every variety—factory, colliery, marine, locomotive, agricultural, &c. Relative to "economy in the raising and use of steam," I have brought before the attention of the members during the past year the importance of surface blowing out, and the advantage to be derived from the use of steam-jackets, as well as from superheating. Surface blowing out is in very general use elsewere, and found successful; it is not monopolised by patents, but is free to all. The use of steam-jackets and superheated steam, aided by surface condensation (a subject on which I shall take an early opportunity of communicating with the members), are now working a perfect revolution in marine engine economy, and are extensively adopted by various large steam navigation companies. In the report of the last annual meeting of the Peninsular and Oriental Steam Navigation Company, the Chairman stated that in a new vessel, called the *Meolian*, of 2600 tons burthen, having engines of 400 nominal horses' power, in which the above principles had been adopted, the consumption of fuel had been reduced to rather less than one-half the usual amount; and the Chairman added that the shareholders would readily perceive the importance of such a reduction in the consumption of fuel, when he reminded them that they had paid as much as 800,000*l*. for coal in one year. It seems to me the very province of this association to circulate reliable information on such points as these—carefully avoiding, of course, at all times the recommendation of anything untried and experimental. In this way I am convinced that the association will continue to be a source of wealth to its members, as well as to the surrounding district; and I am desirous that no year should pass without a decided mark of engineering progress being clearly stamped upon it by the association. Surface blowing out is now being adopted by several of our members; superheating is being introduced; and steam-jackets, so long undervalued, are being revived. I shall have the earliest opportunity of ascertaining full results of their working, and of disseminating this information throughout the entire body of our members."

REPORT FROM NORTHUMBERLAND AND DURHAM.

JAN. 2.—The Coal Trade remains in the same position as lately reported, with the exception of a little better demand for steam coal. The Iron Trade in this district continues also very quiet and dull. With respect to the large ironworks at Consett, rumour has said little about them lately, but it is understood they will not be stopped; that, at any rate, appears to be the general impression.

A local patent is announced of some importance to the coal trade; we allude to a patent of Mr. Johnston, of Newcastle, for "pillars for supporting the roof in coal and other mines." According to this invention, the patentee employs pillars of metal, cast or formed into two parts, and by preference hollow. When the pillar is required for use, the two parts of which it is formed are placed one on the other, and are then secured, and the pillar is set up in its place, as when wooden pillars are employed. When it is desired to remove the pillar (the weight of the roof being then upon it), the fastenings between the two parts of the pillar are removed, when either fall apart or are readily separated, the joint being so formed as to allow of their doing so, notwithstanding the weight of the pillar. It is preferred to make the two parts of the pillar which rest one on the other inclined or bevelled, so that when placed upon each other the parts will just slide if not retained; and in order to hold the parts in their places whilst the pillar is in use, the patentee employs a ring, which slides over the joint, and then prevents the parts moving one on the other. The great advantage this pillar appears to possess is, that it can be removed with facility when required *with the weight upon it*. Wooden pillars and others are often difficult of removal, and also entail much trouble and expense; all this appears to be entirely obviated by the invention of Mr. Johnston. Ordinary pillars are also very often lost, owing to the difficulty of removing them, &c. This invention will, there can be little doubt, prove of the greatest utility in working coal and other mines, particularly where long-wall working is much practised.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JAN. 2.—The news by the *Africa* has raised hopes of peace being maintained, but whilst so many elements of uncertainty continue trade is necessarily checked. However, the Iron Trade is less depressed than might have been expected, and most of the works began on Monday morning after the Christmas holidays, but there are very few orders on hand. Pig-iron is not selling to any large extent, but it appears to be the general impression that the sales for next quarter will be effected at about the same rates as last. A few purchases are mentioned, but generally buyers are waiting to see the course events will take. The Deepfields Furnaces have been taken by Mr. W. E. Gibbons, and are to be put in operation as soon as they are ready for work. Mr. Thos. Rose has taken the Millfields Forge, formerly in the hands of Messrs. Browning and Jackson. Considering the general depression of trade during the year, the failures in this district have not been numerous, or of great amount. This is a matter of congratulation, as the period has, no doubt, been a trying one to firms of limited capital. The Hardware Trades are generally very dull, quite as much so as the iron trade. These branches of trade are, however, singularly free from failures, those of small amount being extremely so.

The depression to which the Iron Trade has been subjected is fully illustrated by the official returns of the exports to the end of November. Whilst the general exports show a falling off during the first eleven months of the year of less than 7 per cent., iron and steel have diminished by 15 per cent. The United States took in 1860 iron and steel to the value of 2,785,334*l*., whilst this year the amount is only 873,565*l*. This decrease is considerably more than the whole diminution in the exports of those metals. There is likewise a considerable decline in the amount sent to the East Indies, Australia, and Russia. The export of iron to France has very rapidly increased under the new tariff, despite the general depression of trade during the year. In the first eleven months of 1860 France took iron of the kinds in which the items are separately given to the value of 163,548*l*.; last year the amount was 486,817*l*., or three times as much. Italy is also importing much more than previously, and the quantity of iron sent to minor countries presents a large augmentation. The machinery exported to France has advanced from 139,244*l*. in 1860 to 321,057*l*., and in hard wares exported there from 100,479*l*. to 173,275*l*. There appears good reason to anticipate that the trade from this country with France will become very extensive when trade improves, as it may be hoped it will soon.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

JAN. 2.—The daily anticipation of decisive news from America as to the question of peace or war, is operating prejudicially to the interests of trade throughout these counties. The general opinion, however, is that there will be a pacific solution of the American difficulty. There is a slow demand for all descriptions of iron, the only departments in which there is the slightest animation being those in which plates are required for ship-building, and iron for railways.

The Coal Trade is very dull, and at some of the works the men are only making four days per week, except at those works in which large contracts are being executed.

The great event of the past week has been the dinner celebration of Messrs. Eastwood and Sons, on the occasion of the erection of large rolling-mills, which have added another branch to the varied trades of Derby. The men, about 300, walked in procession, headed by a band, to the County Hall, near the County Tavern, where a sumptious dinner was awaiting them. Amongst the principal guests were Mr. James Eastwood (Chairman); Mr. Rueben Eastwood (vice-chairman); Mr. T. B. Horsfall, M.P.; W. T. Cox, High Sheriff; J. Hedley, Inspector of Mines; and Lieutenant-Colonel Clay, of the Mersey Steel-works, Liverpool. After the usual loyal and complimentery toasts had been given, the health of the Chairman was given with great enthusiasm, and briefly acknowledged. The practical toast of the evening was "Success to the Iron Trade and Mechanical Engineering." After alluding to the enterprise and perseverance of Englishmen, Mr. Hedley gave some interesting statistics. He said we raised above 80,000,000 tons of coal annually, made upwards of 4,000,000 tons of iron, and consumed upwards of 20,000,000 tons of coal in the manufacture of the same. In Derbyshire, Nottinghamshire, Leicestershire, and Warwickshire, 7,000,000 tons of coal were annually produced, Derbyshire alone producing 4,500,000 tons of this quantity. Iron making in the Midland Counties was confined to Derbyshire, where 130,000 tons are annually made, consuming 700,000 tons of coal: 50 years ago the make was only 12,300 tons annually. The iron of Derbyshire is used for railway and other purposes where body and tenacity are required; and this iron will bear comparison in quality with iron made of the materials of any other coal field. Derbyshire iron has been subjected to many severe tests, two or three of which he mentioned. Some time ago many makes of pig-iron were tested at Woolwich Dockyard, when the iron of Messrs. Whitehouse and Sons, of the West Hallam Works, Derbyshire, bore the greatest breaking strain. It is right to say that these were experiments on iron taken from the bulk. Last month an armour plate, 4½ in. thick, manufactured by J. Brown and Co., of the Atlas Steel and Spring Works, Sheffield, of a mixture of cold and hot-blast iron, made by Messrs. Fowler and Co., of the Sheepbridge Works, Chesterfield, was tested at Portsmouth, and stood a test unsurpassed by any armour plate yet submitted to a test. The Butterley Company have long had a character for superior make of bars, plates, sheets, &c., and they are now rolling the largest masses of iron into girders, &c., of any firm, for girders for our large war steamers. Mr. Barrow, of Staveley, makes several hundred tons of castings weekly; from the largest pipes, girders, and columns, down to the smallest. To show the energy of this gentleman, and the extensive mechanical appliances at his command, he has recently completed an order of 4000 tons of girders and columns, &c., for the Great Exhibition building. The patterns were made, the column ends turned in the lathe, and the castings completed in three months, without interfering with the ordinary work. He has now in hand an order for two miles of railings, for the galleries of the same building. Messrs. Oakes, of Afreton Ironworks, have for a long time maintained a character for superior material and workmanship in their extensive casting business, which embraces castings of every description. All these gentlemen work Derbyshire iron, and there was plenty of material on the ground to make it for 50 years to come. The mining operations of Derbyshire afforded employment to above 5000 hands, in producing materials for iron making, and about 18,000 hands were employed in producing all the coals and ironstone of the county, and an aggregate steam-power of 45,000 horses was employed in raising materials and pumping water from the mines. Mr. Hedley then referred to the progress in mechanical engineering, and concluded by giving practical advice to the workmen. Mr. Charles Markham, of the Midland Railway, acknowledged the toast, and attributed the extraordinary progress that had taken place in every branch of mechanics during the past 10 or 15 years was truly surprising, and was entirely due to the invention and application of tools for the production of machinery for special purposes, which had enabled the manufacturer to produce the most complex machines, capable of performing a very large amount of work at a comparatively small cost. Mr. Horsfall proposed the health of the workmen, which was duly responded to, and after a few other toasts had been given the proceedings terminated.

The lead mining operations in Derbyshire continue to make gradual progress, with one or two exceptions. The North Derbyshire Company

is in a very unsatisfactory position, as regards the payment of calls and the progress of the works. It is true that the company have had immense difficulties to contend with, but it is to be hoped they will be able to cope successfully with them. We have been credibly informed that some of the directors of the company are in arrears with their calls. If this is the case, the company cannot find fault with the shareholders in following their example. The shareholders must look to this; it is unfair that those holding the post of honour should not bear their share of the responsibilities. The shareholders of the Mill Dam Mine will be gratified to learn that the improvement which has lately taken place in this mine still continues, and appears of a more permanent nature; the vein recently cut about 41 fms. from the surface is from 10 to 11 ft. wide, good work throughout, and very good at the sides. The vein in the 44 from wagon-gate, coming up to this point, is widening, and there is every reason to believe will be as wide. The 58 fm. level, being driven in the same direction, is also producing large quantities of ore. Altogether the prospects are very satisfactory, and the shareholders will, in all probability, soon be rewarded for their patience and perseverence. The lead ore sold on the 20th December was 48 tons, the produce of six weeks, and a large quantity was left undressed. The previous sale for six weeks was 31 tons. In the mining share market, Mill Dams and the Prince of Wales shares appear to be the only stocks in demand. Eyam shares are steady, and the mine improving.

REPORT FROM MONMOUTH AND SOUTH WALES.

JAN. 2.—Despite the depressed state of every branch of trade, mining operations continue to proceed with vigour in every part of the South Wales district. The Machen Company are now sinking at Bedwas, near Caerphilly; and it is expected that a rich vein of house coal will shortly be struck. The shaft is 6 ft. in diameter, and the depth already attained is about 20 yards. The Enawr Glyn Colliery, the property of Mr. Thomas Thomas, Fenner, is only a short distance from where the Machen Company are sinking, and the coal is celebrated for house purposes. If the new contemplated branch railway should be carried out, then the coal can be sent to either Cardiff or Newport. This branch is to connect the old and new Rhymney lines, and by it a complete chain of communication will exist between Rhymney, Caerphilly, &c., as also Cardiff and Newport. In the *Mining Journal* of last week we called attention to the want of proper railway accommodation from Rhymney to Newport. The Monmouthshire Railway Company have the power to buy the whole line, and the inhabitants, and especially the commercial classes of the neighbourhood, are eagerly looking forward for a proper passenger and mineral railway from Newport to Rhymney. Unless something is done, the produce of the new opening of the Machen Company will be shipped at some other port. Trade in the Aberdare Valley remains about the same; the Christmas week has been a broken one, and, consequently, it is difficult to judge whether matters are improving. Here, as everywhere else, the all-important topic, particularly amongst those connected with the ironworks, is the anticipated American reply. If the Federal Government should refuse to give up Messrs. Slidell and Mason, the ironworks will be thrown into a worse condition than they are at present, at least for a time: the tin trade will also suffer severely. However, it is firmly expected that there will only be a temporary suspension, and that the opening of the Southern ports will fully if not more than compensate us for the loss of the Northern trade. The prodigious blast-furnace recently erected at the Llwydcoed Ironworks has been blown in, and employment for a great number of additional hands is thereby given.

On the morning of Dec. 24, the schooner *Good Intent*, of Llanelly, was lost in a gale near Scilly. The vessel was on her homeward passage from Caen, in ballast, and when she was near the Scilly Islands, a fearful gale blew, washing everthing overboard, and the crew were obliged to abandon her, with what little clothes they had on. They took to the boat, and were picked up by a foreign vessel, and landed in France, where the British Consul paid them every attention. The Consul supplied each with a new suit of clothes, and forwarded them to Llanelly, where they safely arrived on Saturday last. The schooner was the property of Capt. William Samuel, Royal Exchange, Sea-side, Llanelly, who bought her a few years ago for 400*l*. Unfortunately for the owner, the vessel was not insured.

Arrangements are now pending for the amalgamation of the South Wales Railway with the Great Western and West Midland Railways. A meeting of the South Wales Railway Company has been called for the 16th of this month, when the proposed lease will be submitted to the shareholders for approval, amendment, or disapproval. The *Swansea Herald*, under the head of South Wales Railway, states—"We understand that, in consequence of new arrangements in connection with the leasing of the South Wales line to the Great Western, Mr. Frederick Clarke retires from the position of superintendent. Though Mr. Clarke has the reputation of being a quick-tempered and hasty man, and has, perhaps, made enemies in consequence, it is impossible to over-estimate the immense strain of anxiety and responsibility weighing on any one occupying such a post; and it is gratifying to find that the announcement of his leaving has caused very general and sincre regret among the railway officials, who have had for eleven years the best opportunities of judging him."

The monthly meeting of the Newport Harbour Commissioners was held on Thursday. An animated discussion took place in reference to the want of ballast ground. Mr. Thomas Powell, sen., of the firm of Messrs. Powell and Son, one of the most extensive coalowners and shippers in the world, declared that unless something was done he would be driven away with his trade from the port. Attention was called to this matter some time since in the *Mining Journal*, when Mr. G. Harrison, the secretary of the Monmouthshire Railway and Canal Company, wrote a letter the following week, denying, to a great extent, the statements made in the previous week's *Mining Journal*. Now, however, it turns out that a proper ballast ground is required, and that the want of it drives many vessels, especially coasters, to other ports. The Harbour Commissioners passed a resolution directing a committee already appointed to communicate with Col. Wood and Lord Tredegar, and ascertain from them upon what terms land can be had on each side of the river.

At the Bristol Bankruptcy Court, on Monday, the first meeting of creditors, in the case of John George, coal and slate-merchant, Brinscombe, was held. It was agreed that the estate should be wound-up under the superintendence of the assignee. In the case of John Glover, Swansea, oil and grease manufacturer, the creditors decided that the matter should be transferred under the provision of the New Act to the Swansea County Court.

THE GREAT NORTHERN AND MIDLAND COAL COMPANY.—At the Court of Bankruptcy, on Monday, a petition was presented by Mr. W. Branthwaite, of No. 11, Richmond-terrace, Dalston, praying that this company might be wound-up under the superintendence of the Court. This company was formed in August, 1860, and registered under the Joint-Stock Companies Act of 1856-57, the offices being situate at 49, Skinner-street, Snowhill, and at the Northern Wharf, King's-cross. The nominal capital of the company was 50,000*l*., divided into 10,000 shares of 5*l*. each. The petitioner became and was at the present time a registered proprietor of 50 shares. In January, 1861, the directors entered into an agreement with Mr. George Butcher for the purchase of the business then carried on by him, and paid him, on account of the purchase-money for the same, the sum of 1246*l*. 0s. 9d. At a meeting of the board of directors, held on June 12, 1861, a resolution was passed that the agreement entered into between this company and Mr. G. Butcher, dated January 4, 1861, be rescinded and put an end to, a notice of the resolution and determination being given to Mr. Butcher, pursuant to the 24th and 25th articles of the agreement. The directors reported to the proprietary, in ordinary general meeting assembled on Sept. 12, 1861, that in June a resolution was passed by the company that the said Mr. George Butcher should be required to refund the full amount received by him, and notice to that effect was accordingly served upon him, that if he did not repay the same his affairs would be placed under the administration of the Court of Bankruptcy; and that the said sum of 1264*l*. was wholly lost to the company. No profit whatever had arisen from the trade carried on by the company; but, on the contrary, it had not paid its working expenses. In the report issued to the shareholders in August, 1861, it appeared that only 438*l*. had been subscribed for and taken in the said company; that the deposit of 2*l*. and the call of 1*l*. per share, amounting in the whole to the sum of 1314*l*., which had been paid on such shares, had been nearly absorbed by the payment of 1246*l*; the balance standing to the credit of the company at the bankers amounting only to 18*l*. The directors had made another call, but the petitioner declined to pay it, on account of the outstanding claims against the company, amounting to 1150*l*.; and, considering the unprofitable nature of the business carried on, more than three-fourths of the capital of the company had been lost or become unavailable, and that the whole of the unpaid capital would be insufficient to pay the debts, the petitioner prayed for a winding-up order under the superintendence of the Court. Mr. Roxburgh, who appeared on behalf of the petitioner, stated that proceedings had been taken by creditors against the company, and contended that the directors should not go on making calls, and thus fritter away the money of the shareholders. If the remaining 2*l*. per share was paid it would be insufficient to discharge the liabilities of the company, and, even if the liabilities were discharged, the company had not the means to carry on its business. Mr. Bagley, who on behalf of the directors opposed the application, stated that the company would be able to pay its debts at the proper time, and characterised this as an attempt on the part of Butcher to get back the connection which he had disposed of to the company. The directors believed that their new manager, who had been appointed in the place of Mr. Butcher, would make the company produce profitable results. He then read affidavits which denied that three-fourths of the capital had been lost or become unavailable, and also the principal allegations in the petition. The Chairman said the debts did not exceed 450*l*., and instead of the assets being only 16*l*., they were considerably larger in amount. Mr. Belton, the present manager, deposed that the assets and the unpaid calls were more than sufficient to pay the debts. The company had been instructed that Butcher had threatened, if he was made a bankrupt, he "would smash-up the company;" and he afterwards offered, if they agreed to his terms, to go to Branthwaite and stop the winding-up order. He submitted the petition should be dismissed. Mr. Roxburgh replied that the judgment creditors had seized all the assets under an attachment. The Commissioner thought the company was unable to pay its debts, and therefore he had no hesitation in ordering that the winding-up should issue, and all actions be stayed.

IRON AND STEEL MANUFACTURE.—The past has been a discouraging year to ironmasters. A year ago there were 572 furnaces in blast, out of 839 in the kingdom. Six months ago the number in blast had fallen to 524, out of 882 in all. Prices have ruled very low throughout the year, and many bankruptcies have taken place. We do not doubt that this state of things has induced many intelligent ironmasters to turn their attention to the improvement of ironmaking. Some among them have already attained excellent results in taking off the waste furnace gases for heating, in coking slack, and in substituting steam power to a still greater extent in place of manual labour. Increasing attention is being paid to the Lincolnshire and Northamptonshire ores, and, more lately, to those of Wiltshire. Machinery for puddling has been again brought prominently into notice, but, we fear, without satisfactory results. The Bessemer process is being more extensively practised, it having been already adopted on a large scale at some of the largest iron and steel works in the kingdom, as well as on the Continent. By this process, steel rails are already being made and sold in considerable quantities. The manufacture of armour-plates has brought out the fullest resources of many of the ironmasters, the machinery and appliances required being on a larger scale than anything of the kind heretofore used in this country. On the Continent, Krupp has still further extended his vast steel making machinery, having among other works erected a hammer with a head of the enormous weight of 45 tons.—*The Engineer.*

DEATH OF A MINING ENGINEER.—Mr. Robert Bald died, on Saturday last, at Alloa, aged 87 years. In the course of his long life Mr. Bald has rendered important services not to this country only, but to Europe, as a mining engineer. Within the last forty years, for example, all the coals in many mining districts were brought from the wallface or forehead of the mines by women called "bearers"—married and unmarried, old and young—and Mr. Bald, along with Lord Ashley (now Earl of Shaftesbury), did much to put a stop to this, and generally to ameliorate the condition of the mining population. Fully a quarter of a century ago, many opportunities were afforded to Mr. Bald in Sweden for carrying out important projects connected with his profession as mining engineer, and amongst other marks of the King of Sweden's appreciation of Mr. Bald's services was the gift of a snuff-box of flattened gold, the initials of the King being set in brilliants, with an imperial crown. Mr. Bald was beloved by the people of Alloa, and indeed by all who knew him.

MINING AND METALLURGY AT THE GREAT EXHIBITION.

BY ROBERT HUNT, F.R.S.

In 1850 there was considerable discussion on the question of including native mineral produce in the Great Exhibition of 1851, which many persons thought should be confined to manufactures. The discussion eventually terminated in the formation of Class 1, devoted to Mining, Quarrying, Metallurgy, and Mineral Products. Her Majesty's Commissioners for the International Exhibition of 1862 have come to a similar determination, the only difference being that Class 1 is now considerably extended, and several mineral and metal manufactures are embraced by it.

There appeared, at first, some apathy on the part of miners and quarrymen, and there were grounds to fear that our mineral products might be imperfectly represented; this was, however, dispelled soon after the formation of the National Committee. The first act of that body was to issue a circular, simply pointing out what it was desirable should be exhibited, and the response thereto plainly showed that the apparent indifference was referable to uncertainty and not to unwillingness. Many persons thought there could be nothing of interest in a mass of copper or lead ore, and others imagined that a block of sandstone could have no value in an exhibition which aimed at surpassing everything that had hitherto been done in gathering works of the highest art together. When, however, they were informed that it was a desirable thing to exhibit the products of mines and quarries, the applications for space proved their desire to co-operate in the great work of the International Exhibition.

The Lead Hills of Lanarkshire, once the scene of a wild rush after gold, and always a district producing rare minerals, will send a series of their treasures. Lead ores and their products are coming from Durham, Northumberland, and Cumberland. The mountain limestone regions of Yorkshire will furnish lead and copper, and Cardiganshire and Flintshire will exhibit varieties of their galenas and blendes. The local committees of Exeter, Tavistock, and Redruth are carefully looking up the more remarkable examples of the minerals of Devonshire and Cornwall. That tin ore which has been worked in Cornwall and on Dartmore for more than 2000 years, and which is now being obtained at the rate of 10,000 tons per annum, will be shown as obtained from the stream and from the mine. Several varieties of copper ore, many of the rich argentiferous lead ores of the West, the zinc ores of these counties, the sulphur ores (iron pyrites), and many others, not quite so important, but remarkable as being rare, are to be amongst the illustrations of Nature's bounty to us. Ireland, too, sends over her lead, copper, and pyritic ores.

Although the Exhibition of 1862 will not exhibit such a complete collection of iron ores as the industry of Mr. S. H. Blackwell brought together in 1851, yet most of the new discoveries, and they are many and important, will find a place. The iron ores of Weardale, those of Cleveland, and the recent discoveries in the West Riding of Yorkshire, the remarkable deposits of Lincolnshire, those of the Midland Counties, and the best examples from Somerset, Devon, and Cornwall, will form an interesting series. Amongst the metalliferous minerals, examples of gold from Devonshire will be found; but of the more important gold quartz of Merionethshire we hear nothing.

Coals promise to be abundant. There is scarcely a useful seam from which an example will not be sent. In 1851 there were some gigantic blocks, many of them of little interest, and showing no more of the quality of the coal than would have been shown by a smaller specimen. We hear but little of such masses now. Two or three exhibitors desire to show the entire thickness of the seam they work, and a very few have some peculiarity which can only be seen in a mass of good size; cubical pieces of about 18 in. will be the rule. In most cases the local committees have endeavoured to prevent reduplication, and, in others, the specimens have been determined by the Coal Trade Associations.

Of the earthy minerals there will not be a large display. Fuller's earth, barytes, chalk, sands for glass making, and polishing powders are, however, amongst the list of things for which space has been applied for.

Dorsetshire sends its celebrated Potter's clay, and from the neighbourhood of Newton Abbot, in Devonshire, several examples of the so-called "Teignmonth clay" (because it is shipped from that port), and specimens of articles manufactured from it, will be exhibited. The kaolin or porcelain clay of Dartmoor, and from the extensive clay works around St. Austell, in Cornwall, will form an interesting series. The fire-clays of the coal measure districts of the Midland and Northern Counties, with gas retorts, glass-house pots, and other manufactures from them, will be fully shown. Here, as in many other divisions, there arises what we may term an overlapping of the classes. Class 35 is devoted to pottery, and should include all the manufactures, but many of the exhibitors prefer placing in Class 1, with their clays, the articles made from that material. Melting pots and crucibles have been placed in Class 35; but the makers of them, regarding them as truly metallurgical, prefer seeing them in Class 1.

The building and ornamental stones of the kingdom promise to be fully represented. The sandstones of the coal measures of the North; the dolomites of Yorkshire and the neighbouring counties; the Liassic limestone, oolites, especially those from the neighbourhood of Bath; Portland stone, Purbeck marble, Stonesfield slate, and numerous other varieties, will illustrate our richness in the materials of construction. Granites, from Scotland, from Leicestershire, and from Cornwall, will form prominent objects, since many large examples will be elaborately wrought, and some of them highly polished. The Serpentines of Cornwall, certainly the most beautiful ornamental stone of these islands, will be exhibited in some new and interesting forms. The Irish serpentine, or Connemara marble, will also form a striking object.

The true marbles of Devonshire and those of Derbyshire will come forth prominently. Several tables are manufactured from them; and ornamental vases and other things have space reserved. We learn that the vases made from the black marble of Derbyshire will be of unusual size and great elegance.

The Port Madoc local committee promise a good series of slates and slabs, while the Llangollen quarries will send one of the largest slabs ever got out of a quarry. The articles, such as chimney-pieces, tables, &c., manufactured from slate, and enamelled, will be numerous.

Many models, illustrating mining operations, are in progress of construction, some of them of large size, and very instructive. Sectional models, as of the iron deposits at Whitehaven; of the copper and tin lode at Dolcoath, in Cornwall, made from the rocks themselves, and thus showing the actual conditions, will add greatly to the interest of this section. Models of plans for ventilation; models of safety-cages, and actual safety-cages, will be shown, as will also several machines employed in "dressing" the metalliferous ores for the market.

From this rapid sketch it will be evident that the mineral produce of the country will be fairly illustrated.

In metallurgy, the examples of iron will be numerous, and, at the same time, as nearly all varieties of pig-iron will be found in the Exhibition, there will be some of the most remarkable examples of rolled iron that have ever yet been shown. Rails from 60 to 100 feet in length without a weld; bars of remarkable size and length; sheets of iron of most unusual dimensions; and armour plates which have resisted the battering power of Armstrong's guns, will be there. Cranks, one weighing above 20 tons, and beams of singular size and strength, will prove the capabilities of British forges. Tin-plates will be well illustrated, but the smelters of tin are not patriotic enough to aid in this industrial movement, and unless the Redruth local committee persuades a Cornish smelter to exhibit, the most ancient metallurgical process of the country will not be seen.

The metallurgy of copper, on the contrary, will be fully illustrated, as will that of zinc, lead, and silver, with the refining of cobalt and nickel. Even gold, platinum, and other precious metals will be shown in their processes of refining and the like, tin alone being unrepresented. Space has been secured by exhibitors, perhaps not so much as they may have desired, but still, we hope, ample for the exhibition of the more striking objects. Let us hope that there will be a unanimity of feeling amongst them, and that in the difficult task of arrangement there will be shown an accommodating spirit. It would be in the highest degree desirable, if the exhibitors could, by communicating one with the other, obviate that reduplication of articles which will possibly arise if each one works in ignorance of the plans of his neighbour. Everyone is aware that the manufacturer looks to an exhibition of this high character as a means for making him better known to the world, and it is intended that this should be one of the objects. But let it never be forgotten that the great end in view is an educational one. We are to learn, from the works of other countries, to improve our own manufactures, and, in return, we are to impart to the strangers who visit us imformation which will be valuable to them. By the collision of minds new truths are developed; by an industrial contest fresh powers are called into play, and the world is benefitted by the production of something which either adds to the pleasures of existence or ministers to the necessities of man.

—*Journal of the Society of Arts.*

LLANMORLAIS COLLIERY COMPANY.

In last week's Journal we published the report of Mr. John Blethyn, of Landore, upon the appearance and prospects of the Llanmorlais Colliery, and, judging from it, there can be no question that the shareholders may fairly congratulate themselves upon the possession of a valuable property. We have since carefully examined the coal, and find it to be an excellent bituminous coal, less tender than much of the South Wales bituminous coal, burns with a long flame, and cakes well—indeed, it appears to be a coal which will at all times command a ready sale, both as a house coal and for manufacturing purposes. The seams dip at a heavy angle, but as there is a good hard top and bottom, it is anticipated that but little timber will be required. It is estimated that the coal will work nearly one-half large; and as it is intended to tip the coals from the wagons loaded at the colliery direct into the hold of the vessel, they will, it is obvious, be shipped in the best possible condition. Negociations are pending for the construction of a light railway from the mouth of the pit to a point on the Aberlogin Railway, near the shipping place, and as there is an easy gradient the whole distance, it is proposed to let the full wagons run down, and to haul up the empties by horse-power, so that the cost of transit would be reduced to the minimum.

It must not be supposed that the company will work at a disadvantage, from having to compete with wealthy firms already in existence, or from there being any difficulty in disposing of their coal when raised; the coal being of a rich bituminous quality would meet with a ready demand, even in the anthracite district, on the opposite side of the river. But this is not all, for we understand that almost any quantity can be sold in the South of Ireland the North of France, and in Spain; and that with regard to the latter country, there are peculiar facilities, since there are continual arrivals of vessels with ore from that country, which, unless arrangements can be made for them to take back coal, must return in ballast. The company is considered by the best authorities, both in the district and elsewhere, to have all the elements of success. Mr. C. Morgan, proprietor of the Lynch or Aberlogin Colliery, for example, writing to the Manager of the Llanmorlais Colliery, under date Dec. 25, 1861, says:—"I passed by your pit for the first time this week; I was delighted to see those fine blocks of coal. What a rich country that is! With such a vein, all you will have to do will be to produce house-coal of that quality, which is indeed scarce. We have been the pioneers; our outlay has been very great, but 5000*l*. would set things going for 50 years." When to this we add that the directors are experienced business men, there can be no doubt that their management will lead to successful results.

AMMAN (ABERDARE) STEAM COAL COMPANY.—Although political excitement has superseded even the most legitimate operations in the money market during the last three weeks, the Amman Colliery Company has been an exception to the rule, many dealings having occurred in the shares at ½ premium. Before closing the list of applications the directors have announced that they have before them *bona fide* offers to take all the steam-coal raised at their collieries, whatever additional delivery can be attained at present prices, for five years certain. At that price satisfactory dividends could, no doubt, be maintained; but the board has acted wisely in retaining for the shareholders the considerable difference in the value of the article likely to take place. With a delivery of about 300 tons per diem, the collieries are paying very well at peace prices, and either preparations for war or actual hostilities must greatly enhance the demand. Hence, with increased capital, the presumption is altogether in favour of larger supplies rendered to the purchasers on better terms to the company. So that, in every point of view, this undertaking is not of a speculative but of a strictly commercial character.

THE HINDOSTAN (SINGHBHOOM) COPPER COMPANY, which was lately successfully formed, is making preparations to commence active operations at once. We understand that additional information places the prospects of the company in a more favourable light even than was originally anticipated. A practical copper smelter, who was for some time resident at the works of the company in India, and who, we believe, is about to proceed there again to take charge of the smelting department, gives it as his opinion that within a very few months works can be got in order and fuel prepared sufficient to smelt from 300 to 400 tons of copper per annum, the carriage of which to Calcutta, where there is a large demand for it, will not exceed 4*l*. per ton; and as, from all the accounts received, there appears to be little doubt but that the *mines* can be made to yield almost any quantity of oxidised ores, containing from 15 to 20 per cent. of metallic copper, and this with but a small amount of capital and energy, the success of the undertaking seems certain. If this be so, and it seems well authenticated, it is probable that a very few months will enable the company to make very considerable returns, and to pay large and increasing dividends, and this quite independently of the richer ores, which it would seem may almost immediately be sent, in no small quantity and at great profit, to this country. Starting under the most favourable auspices, we look forward to seeing this company, if well and carefully conducted, take a very prominent position, both here and in India, amongst our great mineral undertakings.

CALCINING SULPHUR ORES.—Some improvements in furnaces for calcining sulphur ores, which are likely to become of importance in the manufacture of sulphuric acid, as they are said to offer a complete solution of the nuisance difficulty in the Swansea copper-works, with the production annually of some 300,000*l*. to 350,000*l*. worth of sulphuric acid, at a merely nominal cost, have been invented by Mr. Peter Spence, of Pendleton Alum Works, Manchester. The inventor has already five furnaces at work in his own business, and four licenses just commencing. Taking Dr. Percy's data as his guide, he declares that he could undertake to calcine all copper ores with about the half of the present expenditure of fuel, and with the conversion of all the sulphur eliminated into sulphuric acid, the only cost of this acid being the nitrate of soda, which, with his furnace, is only half of that regularly used; and, in addition to the interest of the capital invested in vitriol chambers, no labour would be expended on the acid manufacture.

THE TIN STANDARD.—To most people not intimately acquainted with Cornish mining, the system of computing the quantity of black tin in the stone, or even the mode of estimating the money value of this black tin from the standards fixed by the smelters, is an almost inextricable riddle. Local customs have certainly managed to involve a matter, simple enough in itself, in a very unnecessary amount of complication; as M. Moissenet very justly says—"On arrive à introduire des complications, presque mystérieuses, là où une simple règle de trois pourrait suffire." As we shall continually have occasion to refer to both these points, and assume an acquaintance with them on the part of our readers, we think it advisable to give a short explanation of them. The first step is to find the produce, which is estimated at so much in 20. This is done by trying a sample of 1 ounce = 20 dwts. in a crucible with a proper mixture of anthracite (generally about 5 dwts.) for reducing the oxide, and sometimes a certain proportion of borax for flux. The weight in dwts. of the button resulting from this assay is the produce of the sample—let us say 13¾ in 20 (which equals 68¾ per cent.) From this produce of 13¾, a fixed deduction (which remains the same whatever the produce may be) of 1¼ is made for returning charges, which reduces the nett produce to 12½. The quality of the metallic tin is next examined into, and its class is fixed as common or fine, as the case may be. A standard being fixed periodically by the smelters for each of these qualities, the money value is found by *multiplying the standard by the nett produce, and dividing by* 20. For example, let us take the instance assumed above of a produce of 13¾, and let us suppose that the quality of the tin was common. We then have 13¾, less 1¼ (for retaining charges) giving the nett produce as 12½. At the time we write the standard of common tin is 109*l*., to which, if we apply the above rule, we have (109*l*. × 12½) ÷ 20 = 68*l*. 2s. 6d., value per ton of the black tin. Besides the allowance of 1¼ for returning charges, the smelter also receives an allowance of 3 lbs. per cwt. for "wastage;" the black tin being weighed off at 115 lbs. to the cwt., or 20 cwt. 2 qrs. 4 lbs. to the ton. From the above data, an adventurer in a tin mine is in a position at once to ascertain what his black tin should realise per ton, knowing the produce and quality, which he can at any time ascertain from a sample of the black tin. The two following examples may make the matter still plainer:—With a sample of black tin, giving a produce of 13¼ common tin, find the value per ton, the standard for common tin being 111*l*. If from 13½ we deduct 1¼, we have 12¼ for nett produce, which gives us (111*l*. × 12¼) ÷ 20 = 67*l*. 19s. 9d., value per ton of black tin. With a sample of black tin, giving a produce of 13¼ fine tin, find the value per ton, the standard for fine tin being 114*l*. Deducting the 1¼, we have 12 for nett produce, which gives (114*l*. × 12) ÷ 20 = 68*l*. 8s., value per ton of black tin. Almost all the tin ore raised in Cornwall is sold by private contract at prices thus calculated, from fixed standards.—*Mining and Smelting Mag.*

PROPOSED WATERLOO PALACE AND WINTER GARDEN.—An old proposition is being revived—that of an edifice or ornamental structure over and above the carriage road and pathways of Waterloo-bridge across the Thames from Lancaster-place to Waterloo-road, consisting mainly of iron, glass, and slate materials for the purpose of forming and establishing a winter garden, conservatories, museums, and shops or stalls, for the instruction, recreation, and amusement of the public, after the Thames Tunnel style, with all necessary roads and approaches, at an estimated cost of 250,000*l*. It is proposed to appropriate by agreement with the Waterloo Bridge Company such portions of the existing carriage roads, footpaths, piers, and abutments as may be required, and

to vary, extend or enlarge the bridge if requisite. The palace is to be completed within three years, and it is proposed to take entrance money or toll for admission of the public, and to enter into contracts with the Waterloo Bridge Company for that purpose.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

One of the best discoveries for many years has recently resulted from streaming operations at the head of the Goss Moor. Some 12 months since a party under this title took up a grant for washing the surface and backing up a lode, and discovered a very rich vein of tin. They followed it down by a water-wheel, and having opened a pit 4 fathoms deep, from which a considerable quantity of very rich tin was broken, they at once set about a new shaft, but getting only 8 fathoms deep were compelled to cut the lode, or be driven out for want of power. Choosing the former, they summoned manual strength too for the temporary purpose, again intersected the lode, and the parcel of tinstuff broken therefrom far exceeds the shallower level, the lode at the same time becoming more settled, and altogether assuming a very valuable and inviting character. This attempt having, however, closed their ability to mine, they determined on proving the lode in length by what is termed sboading or costeaning, and although the chances of finding are very uncertain, from the great depth to which the general surface has been turned by the ancients, as well as constant subsequent washings up to the present moment, they have, nevertheless, succeeded in backing away the lode for a considerable length with (to say the least) equal value. Having thus gone the length of their tether, they have now negociated with a party for more extended operations, and it is alike gratifying to find they have both realised a deserved profit, and made a transfer to men who will at once form a company for fairly testing the merits of what may now be termed an extraordinary concern. The sett is very beautifully situated for the junction of granite and killas, the lode being embedded in the latter in its most favourable geological character of light argillaceous slate, to which must be added every other general feature conducive to cheap mining, the water charges being commandable by very light machinery, and the work of developing further favoured by a possible degree of expedition and constant economy in exploration rarely to be met with. For the locality nothing need be said, as it stands altogether unrivalled for yield of tin by such pigmy efforts as have hitherto been adopted, but when time shall have led speculators to find new districts (rather than the happily waning custom of following others), this at present much-neglected portion of the county will be found another great mining field. It is by the spirit of enterprise so dominant in Englishmen that every new district has been discovered, and here rich lodes abound, down to the very lowest point followed by the rude means described, only waiting the same degree of trial to ensure like results. That the present TREGOSS HEAD COMPANY may be successful as pioneers is the wish of the writer, and if the certainty of a paying mine to commence with be any merit, they have one before them, as I am assured by a captain, who knows well the value of tinstuff, that "the lode is 3 feet wide, worth 5 cwts. of black tin per 100 sacks, and may be taken away for 15s. per fathom."

NORTH HAFOD.—The sinking of the engine-shaft in this mine proves that the carbonate of lime which made its appearance in such strength on the top of the lode is decreasing in depth, and the lode is becoming more congenial for ore. From all appearances, good ore ground may be at any moment met with at this shaft. The wheel is now erected, and the pitwork ready for fixing when required.

LADY ELIZA LEAD MINE.—We hear that this mine is about to be vigorously worked, the prospects being of the most promising character. The offices have been removed from Moorgate-street to 2, Crown-court, Threadneedle-street; and Mr. Searby, jun., has been appointed secretary.

ST. JUST UNITED.—I noticed a few weeks back that the directors were in treaty for a steam-engine for this valuable property; I am now glad to learn, after having secured the valuable services of Mr. George Eustice, that he recommends the engine as of the first-class, and commends the directors for their success in obtaining such a property upon such reasonable terms. The engine will be removed at once: the house is up, and before the mine is thoroughly drained tin will be in the market monthly. This mining property will before long, after extending the levels through the granite into the killas, make a mass of copper, precisely as Botallack and Levant did. But, if the directors would take my advice, they would sink the engine-shaft 20 fms. deeper, and they then would have the intersection of several lodes, which will prove the best mine in Cornwall.

CUDDRA.—The lode in Walker's shaft, sinking below the 60, is being taken down, and worth fully 7 cwts. of tin per 100 sacks. It is expected this shaft will soon be at the 70, when levels will be driven east and west through this rich course of tin. The stopes are without alteration—worth from 2 to 2½ cwts. of tin per 100 sacks.

WHEAL GRYLLS has greatly improved. The lode above the slide, in Annie's engine-shaft, was worth 18*l.* per fm.; and having got fully through the slide the lode has considerably increased, and is now 3 ft. wide, worth from 25*l.* to 30*l.* per fm. The lode at Georgia shaft is worth from 40*l.* to 50*l.* per fm. A good discovery has also taken place in a winze sinking below the 10 fm. level, where the lode is now worth from 20*l.* to 25*l.* per fm. The 20 east is worth from 7*l.* to 9*l.* per fm., and east of flat-rod shaft 5*l.* to 7*l.* per fm., and west 6*l.* to 7*l.* per fm. The winze below the adit is worth from 10*l.* to 12*l.* per fm. The steam-stamps engine will go to work this month, when increased profits will be made.

WEST SILVER BANK.—We had recently to notice that the engine-shaft in this mine had got into a floor, or bar, of poor ground. We are now happy to inform the shareholders that the shaft has got through this bar of unproductive ground, and is now sinking in a very fine lode of ore. I call attention to this as being of more than ordinary importance, for supposing the mine had been inspected during the period that the poor ground was in the shaft, conclusions might have been drawn unfavourable to the general prospects of success which may be fairly expected in this young mine, than which no mine offers a more cheering aspect in the neighbourhood.

ABERNANT MINE, CARDIGANSHIRE.—The old adage, "That mines are formed for all ages but not for all men," is exemplified in a very peculiar way by the discovery of the Abernant Mine. Not that the discovery is modern; on the contrary, the finding of the ore ground is of ancient date, in fact, I believe time immemorial, for the pits along the back of the lode are only a few feet deep, and were found at the present time only filled with leaves, the out-cropping of the lode being in a wood of small oak timber on the north bank of the River Rheidol. On removing the rubbish on the costean pits, pinnacles of rich silver-lead ore were found coming up to within a few feet of the surface for a length of 50 fms. or 100 yards, and on blasting up the lode along the bottom of these shallow diggings the lode discloses a continuous long hard course of silver-lead ore. There is no doubt, if it had not been for the difficulty of comminuting this hard but rich material for the purpose of dressing or cleansing it for smelting, this great deposit of silver-lead would have been worked ages ago; but the fact of its being impossible to bruise it by means of hand labour and hammers, no doubt was the cause of its preservation to the present period, and at this time our mills for crushing hard silver-lead ore are so efficient that a 30-ft. water-wheel, with a fair supply of water, driving rollers of large diameter at a slow speed, is capable of reducing 70 tons of such ore in one day. This reduction really costs but very little; a little oil and a little wear and tear of iron, amounting to a few pence per day, are all that is required to do the work, and 70 tons of such stuff would yield 3 tons of clean ore, worth 60*l.* For the present, it would be unwise to work this rich vein faster than to produce more than between 20 and 30 tons of stuff per day, which will yield about 20*l.* worth of lead and silver; but to do this at the starting of a mine, which will be done at Abernant, shows how the rich prizes that nature provides for man exist in various parts of mining districts; and although open to public view, are only availed of when the proper time and the fortunate people arrive to develope them.

PELYN WOOD.—This unfortunate but very promising concern is to be wound-up: it is a great pity that the shareholders should abandon such a mine now they have all but reached the desired objects—the four or five east and west lodes; and I verily believe that 2000*l.*, economically laid out, would open up a good and lasting mine at Pelyn Wood. Such advantages for cheap working are rarely to be met with, with ample water power to put the mine to any reasonable depth. There are several east and west and caunter lodes traversing the sett, and four large cross-courses, the same as traverse the old Fowey Consols, near which the lodes in that mine have produced large quantities of rich copper ore. One of these, called the caunter lode, in the Pelyn Wood, is very promising to produce a great deal of copper in depth. I care not what other people's opinion may be of this lode: I fearlessly state it as my opinion that it will produce a great deal of copper about the 30 and 40 fathom levels and downwards; of course, it is rather out of the general rule, but there are exceptions to all rules. I am quite sure in my mind that if I had had the management up to this time the mine would have been paying its own cost ere this; but after I had done the burthen of the work, and advanced money to the labourers to prevent law suits and keep the mine working, I was removed from the management, as payment for my trouble, &c., and others placed there who, I am sure, know but little about heaves, slides, &c. I would advise the shareholders to purchase the mine, and rework it, under the management of some one acquainted with the district; they will then get back their money, with much interest, in a very short time. The 10 fm. level must be nearly home to a large east and west lode: this lode has a promising appearance in a pit sunk on it about 10 ft. deep; in this place it is all 4 ft. wide, producing fine gossan, with copper interspersed in it. South of this lode there are three other east and west lodes; there is a large elvan-course traversing the sett. There are several large copper lodes north of the engine-shaft; three within 40 fms. of the surface; one showed up in the wheel-pit, where it is full 4 ft. wide, composed of mundic, prian, and copper; a great many miners and gentlemen saw this lode, and there was but one opinion — that it had the appearance of being well filled with copper; at a deeper level many tons of rich ore was returned from this lode by the former workers, about 50 fms. to the south of the engine-shaft; this shaft should be put down 10 or 20 fms. deeper, to be under the horn-blende dyke, and a level driven out to the east and west lodes in that direction. The shaft was in course of sinking below the 22 fm. level, when, in my absence, the secretary and some of the shareholders came there with a mine captain, and stopped the sinking; and since I left the captain stopped the 22 fm. level, and spent a deal of money in driving the 10 fm. level on a lode that we intersected in the cross-cut, but no appearance for copper to be found in it at that level: had they driven the 22 fm. level to this and the other lodes, in all probability they might have found something good. I would remind the shareholders that the mine is a good speculation, and could be proved for a trifling outlay; that they would do well to look to their own interest, and not allow others to come in and reap the benefit of their outlay.—JOHN SEYMOUR.

WHEAL SICILY AND WHEAL JANE (formerly called the Broad Oak Consols and Cardynham Mines).—I am glad to see what I prognosticated of these mines unfolding; as, by the report last week, they have a fine course of silver-lead in the adit level at Wheal Jane, and the steam-engine will soon be put to work to fork out the old shaft that was put down under my superintendence, for Messrs. Vatcher and Co. The lode in this shaft is likely to pay well for working. The east and west lodes, near this shaft, are likely to pay well, copper being found in them very near the surface, and the lead lode produces some fine stones of both yellow and grey copper. For years I have endeavoured to induce speculators in mining enterprises to try this district. I would say, again, that parties who are inclined to mine should take up the ground to the east and south of Wheal Sicily, and east of Wheal Jane. Finer prospects cannot be seen, the lodes are numerous, and large. There is a shaft put down in a sett east of the Sicily 25 fms. deep, three copper lodes intersected, and a lead lode 4 feet wide, composed of soft quartz, flookan, and silver-lead; the time this was done lead was of little value. Ample water power is available for all purposes to work this ground, consequently there is no need of costly steam power. The old Wheal Catherine, formerly worked under the management of Messrs. Fuller and Co., is a good speculation. I have seen some very good silver-lead and copper taken out of this mine. I feel assured if speculators would pay attention to what old practical miners advise, mining would be less of a speculation than it is. In the Camborne district there are several new and old mines about to be put to work; amongst them is the old Wheal Camborne. This mine is near West Wheal Seton, embracing some of the same lodes. This mine was worked about 41 years back, and the shaft was sunk to a depth of 13 fms. below the adit level, which is only 4 fathoms deep. They intersected a large lode at the bottom, and cut into it 5 feet; this is composed of soft spar and copper. Two other lodes will fall into this in their downward course, one about the 30 fm. level, the other near the 40. These are favourable omens, as this piece of ground is likely to be as rich in copper as its neighbour, the West Wheal Seton, which has paid in dividends 120,000*l.*, and the market value of the mine and materials is 88,500*l.*=208,500*l.* upon an outlay of 20,000*l.* It is supposed that from 7000*l.* to 9000*l.* will be all that is required to bring the Wheal Camborne into a dividend state, there being something like 4000*l.* worth of available work done by the former party, and there are indications of the cropping up very near the surface. The lode in the bottom of the adit is 5 ft. wide, carrying good spots of yellow copper and fine gossan. No one can possibly do wrong by investing money in this mine. The opinion of the miners is that if the 13 be driven east under the hill a great deal of copper will be met with. It may be argued by some that this cannot be all true, for had it been so the former party would not have abandoned such a property. To put this right, I will give an explanation. The engine they had for pumping was very small, and in a very depressed state, so that after cutting into the lode the engine was not powerful enough to keep away the water, and, the mine being in debt and the company very poor, they had no means to purchase a new one. I should have noticed before that the ground throughout the mine is easy for penetrating, being a soft clay-slate. Other mines near this are about to be set to work. The old Wheal Hartly is a very promising piece of ground, traversed by several large and promising lodes and cross-courses. It is likely I shall refer more fully to this next week.—JOHN SEYMOUR: Jan. 2.

ABERNANT MINE.—The course of silver-lead ore continues to yield extraordinary quantities of rich ore from every pit sunk along the surface of the lode for a distance of 100 yards. Every effort will be made to supply the mine with crushing machinery, with a view to the reduction of the produce, and the making it marketable as early as possible.

OLD DARREN.—The men are busily employed forking the water from the 10, in Daren Fach. The wheel and rods are already repaired, and in good working order. The crushing machinery is undergoing complete repair, the levels are being cleared out and properly secured with timber, and many ore bargains are at work at one-half profit. When this old mine is set in good order, the sales of ore are likely to equal those of the best mines in Cardiganshire.

ST. JUST UNITED.—I am glad to say nearly all the shares are subscribed for, and the direction is so respectable that several persons from the neighbourhood of the mines, Plymouth, and Tavistock, called yesterday at the office applying for shares. I am glad to find that one of the principal firms in Tavistock called on the secretary, at No. *b*, Warnford-court, yesterday, and engaged 100 shares before the list should be closed.—JOHN CARTREW.

BRONFLOYD, CLARA UNITED, AND LLYWERNOG.—The secretary of these companies informs us that each mine is stopped from the severe frost.

At the WEST KAIME MINE a most important discovery was made on Friday last: in clearing up an old shaft a lode 12 feet wide, nearly solid grey ore, was intersected, from which 2 to 3 tons daily may be raised. On the mine are now 25 tons dressed, and a very large quantity ready for that process. The discovery referred to was made in the eastern shaft, approaching the rich mine of Lochwinnoch Consols. The lode has been proved the whole distance to that mine, about 60 fms., and copper cut in the backs of the lode the whole way. It has now been determined to open the ground towards that mine, on the course of the lode, in addition to the present works going on towards the west; the latter has been so successful as to have paid working cost from the very commencement. Necessary machinery is to be forthwith erected, and additional capital to the extent of 3750*l.* is to be introduced, the prospectus to raise which is in the press, and will be issued in a few days; it is quite understood this is a matter of form, the greater part, if not all, the required money being already subscribed.

EAST CARADON.—The report which appeared in last week's Journal calls for some remark; I will, therefore, thank you for space to enlighten distant shareholders on the actual merits of the mine. We are all aware of the 50 fathom level being a rich course of ore for nearly 140 fathoms long, which, doubtless, is the greatest discovery in Cornwall, and the eastern end continues rich, and I have no doubt that it will hold good to the boundary of the sett. The 60 fathom level also proves to be a rich course of ore for the whole extent of the drivage, and we must remember we are not up to the great deposit gone through in driving the 50 east. At the present time the reserves of ore in this mine are but little short of 100,000*l.*, taking the 50 fathom level as a guide. There are the same good indications for the 70 fathom level, and there is not the least cause to fear anything but a rich lode when intersected at the 70, the same lode having cut rich at the 100 in South Caradon. Now, as these lodes underlie north towards the 70 fm. level cross-cut, it will shorten the distance to drive, so that three months may suffice to accomplish the great object now before us. On cutting a rich lode at the next level, and of which I entertain no doubt whatever, we may fairly estimate 70,000*l.* worth of ore added to the present reserves. The new south lode is of itself a good discovery, being worth from 25*l.* to 30*l.* per fathom, and as it can be reached throughout the full length of the mine at a trifling cost by short cross-cuts from the different drivages on the rich caunter, it is a great acquisition to the property. Shareholders should bear this in mind, and not be alarmed by the twaddle of the "bears." Several of my friends invested in East Caradon, through my advice, at 7*l.* and 8*l.* per share, and many of them have held on to the present time; but when shares got up to 12*l.* and 14*l.* I received many letters saying—We are advised to sell in East Caradon by Mr. So and So. My reply was, "Don't sell a share;" and to those of my friends who acted accordingly I would now say "Buy East Caradons at present price, and average your cheap shares, for an investment is not too late." On cutting a good lode at the 70, shares must advance and the dividends must increase. Your ably-written leading article of last week on this mine leads us to expect dividends for 1862 of 4*l.* or 5*l.* per share, an opinion in which I concur. The year of 1861 is at a close, and I sincerely hope 1862 will enable us to discover many such mines as East Caradon. And I would advise those agents who are working mines in this locality, as yet unprofitably, not to attempt to depreciate one of the best mines in England, and to which they are much indebted—it acts as a motive power to keep the great wheel of fortune in their mines going. It causes capital to flow in abundance, and confers innumerable blessings on the hard-working miner and his family.

INGENIOUS MECHANISM.—During the Christmas week, Mr. Osborne, the well-known provision dealer on Ludgate-hill, exhibited in his window a novel application of water-power;—complete models of a well-arranged dairy, representing the various processes for the production of butter, cheese, bacon, &c., and each operator busily employed. The water-tank, from which the hydraulic power which set all this in motion, was concealed in a cottage of a rustic character. Added to the attributes of the farm, there were several very cleverly arranged accessories. A body of volunteers were made to march in time over a bridge, and disappearing appear again, with the numerical economy of a minor theatre. A splendid trout stream, fretted, gurgled, and dashed down the estate, and found for awhile a quiet resting place in an artificial lake, where a fountain disported, and renewed the oxygen, which gave additional vigour to the tiniest of minnows, which we were pleased to consider as salmon, or trout at least. Nor was the great power of water as steam unrepresented, for an admirable model of a locomotive ran with unusual regularity without an accident! Although the whole affair was doubtless got up to attract customers, it certainly had its educational tendencies in the science of hydrostatics.

NEW GUN.—Mr. Jarre, of Paris, has just specified as a communication to Mr. Henry, the patent agent, Fleet-street, an improved construction of fire-arm, with separable breech, so contrived that it may contain a number of charges or cartridges, and may be readily taken in and out of the gun. When inserted therein it takes up a horizontal position at right angles to the barrel, and is caused to travel transverely to the same by an action of the trigger, which is so contrived that when pulled it cocks the gun, and moves the breech one notch, so as to bring the cartridge to the barrel, and under the cock. When the trigger is released the cock drops, and discharges the arm.

HOLLOWAY'S PILLS AND OINTMENT—HEALTH TO THE SICK.—Purifying and renovating properties of a remarkable kind are the characteristics of these inestimable vegetable remedies. The poor sufferer, well-nigh worn out by lengthened disease, may still be strengthened and restored by the tonic influence of these medicaments. In dyspepsia, loss of appetite, flatulency, and liver complaints, while the pills are taken, the ointment should be rubbed over the digestive organs. In heart and chest complaints it should be rubbed on the back and chest as assiduously as salt is rubbed into meat. By steady perseverance with this treatment the blood is purged of all impurities, and the whole animal system thoroughly regulated. These excellent remedies in most cases restore the sick to health.

TO IRONFOUNDERS AND OTHERS.—REQUIRED, TENDERS for CAST IRON PIPES, BENDS, BRANCHES, SYPHONS, &c., for the Adelaide Gas Company, South Australia. Specifications to be seen at the office of Messrs. Filby and Co., 63, Fenchurch-street, London, E.C., between the hours of Twelve and Two. All communications by letter to be addressed to the company's agent, Mr. J. LANYON, jun., to care of Messrs. Filby and Co. Tenders must be received on or before the 10th day of January next.

Will shortly be published, price 1s., a

BRIEF REVIEW OF THE MINING MARKET FOR THE YEAR 1861, together with a List of the Dividends Paid, a Comparative Statement of Prices on Dec. 30, 1860, and Dec. 30, 1861. Also, Particulars of the various Ore Sales throughout the year, by WEBB and GEACH, of 8, Finch-lane, and Stock Exchange, London. Printed by Williams and Strachan, Lawrence-lane, Cheapside, E.C.

RAILWAYS AND MINES.
"THE MINING REVIEW,"
AND Messrs. R. TREDINNICK AND CO.'S TRADE CIRCULAR,
STOCK and SHAREBROKERS, and DEALERS IN BRITISH MINING SHARES,
78, LOMBARD STREET, E.C.
Capitalists who seek safe and profitable investments, free from risk, should act only upon the soundest information. The market prices for the day are for the most part governed by the immediate supply and demand, and the operations of speculators, without reference to the *bona fide* merits of the property. Railways depend upon the traffic, expenditure, and capital accounts, the probabilities of alliance or competition with neighbouring companies, the creation of new shares, the state of the money market as affecting the renewal of debentures, and other considerations founded on data to which those only can have access who give special attention to the subject. Mines afford a wider range for profit than any other public securities. The best are free from debt, have large reserves, and pay dividends bi-monthly varying from £15 to £25 per cent. per annum. Instances frequently occur of young mines rising in value 400 or 500 per cent. But this class of security, more than any other, should be purchased only upon the most reliable information. The undersigned devote special attention to railways and mines, afford every information to capitalists, and effect purchases and sales upon the best possible terms. Thirty years' experience in mining pursuits justifies us in offering our advice to the uninitiated in selecting mines for investment; we will, therefore, forward, upon receipt of Post-office order for 5s., the names of six dividend and six progressive companies that will, in our opinion, well repay capitalists for money employed.
Messrs. TREDINNICK AND CO., 79, LOMBARD STREET, LONDON, E.C.

DAVEY'S PATENT BLASTING POWDER,
MANUFACTURED BY DAVEY BROTHERS AND CO.,
NANCEKUKE POWDER WORKS, TUCKINGMILL, CORNWALL.
This blasting powder possesses the following advantages over every other in use:—Its COMBUSTION is SLOWER and MORE PERFECT when confined in the hole, it is MORE IMPERVIOUS to MOISTURE, PRODUCES LESS SMOKE, is LESS DANGEROUS, it BURSTS as MUCH ROCK with a CHARGE OCCUPYING the SAME or even LESS SPACE, and its WEIGHT being TWENTY to TWENTY-FIVE PER CENT. LESS than ordinary gunpowder, a SAVING of ONE-FOURTH the COST is EFFECTED.
DAVEY BROTHERS and Co. beg to state that this powder is specially made for blasting, and from its slow combustion is not adapted for projectiles. They would, therefore, caution consumers not to be induced by interested parties to put it to a fallacious trial, by firing a ball from a mortar, which is no test of its explosive force when confined.

COLONIAL BANK.
Subscribed capital £2,000,000
Paid-up capital 500,000
The Court of Directors of the Colonial Bank hereby give notice that, in pursuance of the provisions of the Charter, a HALF-YEARLY GENERAL MEETING of the proprietors will be HELD on WEDNESDAY, 8th of January, 1862, at the London Tavern, Bishopsgate-street Within, at Twelve for One o'clock precisely, to receive the report of the proceedings of the Corporation, and for the election of five directors and one auditor, in the room of the following gentlemen, who go out by rotation, viz.:—
Sir Minto Farquhar, Bart., M.P.,
William Tetlow Hibbert, Esq.,
Thomas Masterman, Esq., } Directors.
Charles McGarel, Esq.,
Thomas Naghten, Esq.
Eden Colvile, Esq., Auditor.
Who, being eligible, offer themselves for re-election. The transfer books of the Corporation will be closed on the 27th inst., and re-opened on the 17th January, 1862.
By order of the Court of Directors, C. A. CALVERT, Sec.
13, Bishopsgate-street Within, December 16, 1861.

THE MERCANTILE BANK, LIMITED.
Incorporated under the Joint-Stock Companies Acts, 1856-7-8, whereby the liability of each shareholder is limited to the amount of his shares.
Capital £1,000,000, in 10,000 shares of £100 each.
Deposit on application, £2 per share; and on allotment, £3 per share.
DIRECTORS.
PHILIP ANSTRUTHER, Esq., Deputy-Chairman of the Bank of Egypt.
JOHN BRADBURY, Esq. (Bradbury, Greatorex, and Co.), Director of the National Provident Institution.
GEORGE COBDEN, Esq. (George Cobden and Co.), Staining-lane.
JOSEPH COOPER, Esq., (Lloyd's, Cooper, Box, and Co.)
ADOLF ELLISSEN, Esq. (Ellissen and Co.), London and Hong Kong.
CHARLES GILPIN, Esq., M.P., Director of the South-Eastern Railway.
WARREN STORMES HALE, Esq., Alderman (Warren S. Hale and Sons), Queen-st.
JAMES MORRISH, Esq. (Jeffery, Morrish, and Co.), London and Liverpool.
FRANCIS NASH, Esq. (Nash, Hicks, & Nash), Director of the London Corn Exchange.
W. GORDON THOMSON, Esq., Deputy-Chairman of the South-Eastern Railway.
CHARLES WHETHAM, Esq. (S. Whetham and Sons), Director of the Scottish Australian Investment Company.
(With power to add to their number).
BANKERS—The City Bank, Threadneedle-street, E.C.
AUDITORS—Arthur Cooper, Esq., Public Accountant, 13, George-street, Mansion House; Frederick Maynard, Esq., Public Accountant, 19, Bread-street.
SOLICITORS—Messrs. Davidson, Bradbury, and Hardwick, 22, Basinghall-street.
BROKERS—Messrs. Bragg and Stockdale, 6, Throgmorton-street.
SECRETARY (pro tem.)—Samuel Stockton, Esq.
TEMPORARY OFFICES,—ST. MICHAEL'S HOUSE, ST. MICHAEL'S ALLEY, CORNHILL.
ABRIDGED PROSPECTUS.
The universal success of all respectably conducted banks recommends their shares as a most profitable investment; and now that Parliament had made the principle of limited liability applicable to banking companies, the danger which formerly attached to their shareholders on account of their unlimited liability may be avoided by registration under those Acts.
Applications for shares must be made in the form annexed to the prospectus. The deposit of £2 per share must be paid to the company's bankers, for which a receipt will be given. If no allotment be made, the deposit money will be returned in full; and if a less number be allotted than is applied for, the surplus will be used towards the payment on allotment.
Prospectuses, and forms of application for shares, may be obtained at the temporary offices, and of the brokers.

THE MERCANTILE BANK, LIMITED.—This company having arranged for an AMALGAMATION with the METROPOLITAN AND PROVINCIAL BANK, LIMITED, persons desirous of having shares in the amalgamated company must apply for shares in the Mercantile Bank on or before the 8th instant.

THE MERCANTILE BANK, LIMITED.—Notice is hereby given, that NO FURTHER APPLICATIONS FOR SHARES in this company can be RECEIVED AFTER WEDNESDAY, the 8th inst.

DODDS' IRON AND STEEL PATENT LICENSING COMPANY (LIMITED).
This company is PREPARED to GRANT LICENSES on moderate terms for the USE of their PATENT for STEELING RAILS, POINTS, CROSSINGS, MACHINERY, and EVERY DESCRIPTION of IRONWORK.
The process, which is exceedingly reasonable in cost, and gives the most extraordinary durability to the material, has been highly approved of by the following gentlemen, firms, and companies, several of whom have extensively adopted the valuable improvement:—
ROBERT STEPHENSON, Esq.
JOHN BOURNE, Esq.
J. PERRING, Esq.
THOS. E. HARRISON, Esq.
THE GREAT INDIAN PENINSULA RAILWAY COMPANY.
THE NORTH-EASTERN RAILWAY COMPANY.
Messrs. STEPHENSON AND CO.
THE EAST LANCASHIRE RAILWAY COMPANY.
THE GREAT NORTHERN RAILWAY COMPANY.
THE MIDLAND RAILWAY COMPANY.
THE METROPOLITAN RAILWAY COMPANY have ordered a large quantity of rails by this process.
The FOLLOWING FIRMS are PREPARED to EXECUTE ORDERS under the company's patent:—
Messrs. S. BEALE AND CO., PARK GATE, ROTHERHAM.
Messrs. DODDS AND SON, ROTHERHAM.
Messrs. LOSH, WILSON, AND BELL, NEWCASTLE-ON-TYNE.
THE EBBW VALE COMPANY, SOUTH WALES.
Messrs. LEVICK AND SIMPSON, NEWPORT, MONMOUTHSHIRE.
Messrs. LLOYD, FOSTERS, AND CO., WEDNESBURY.
THE ISCA FOUNDRY COMPANY, NEWPORT, MONMOUTHSHIRE.
Applications for Licenses can be made to R. COOKE, Esq., at the company's offices, No. 7, Size-lane, London, E.C., where also testimonials and other information may be obtained.

GAS AGAIN.—Another fearful fire, at No. 5, Richard-street, Limehouse-fields, caused by an escape of gas. This could not have occurred had one of HUGHES'S PATENT SAFETY ATLAS INDICATING CHANDELIERS been used. All persons having gas fitted should, therefore, have the IMPROVED ATLAS CHANDELIERS FIXED. Kept in stock by all gas-fitters. Drawings free by post, and a large stock always ready for the trade and merchants at the Atlas Works, No. 96, Hatton-garden. R. H. HUGHES.

LAKE SUPERIOR, U.S.—Mr. G. W. HAMBLIN, Post Master, Negaunee Post-office, Marquette County, Lake Superior, U.S., has opened an office as above, for the purpose of supplying mineralogical specimens generally, but more particularly such as are peculiar to the district, to museums and collectors throughout the world. From his acquaintance with the different localities on the Lake, and with mining captains, he has facilities for collecting minerals, also for procuring the rarer sorts. Residing in the centre of the iron district, Mr. Hamblin can furnish specimens of ores of great beauty as cabinet specimens, of which the mammiliary and stalactitic forms of hematite are worthy a place in any cabinet. He can also supply specimens of native copper and silver, with the accompanying minerals, many of which occur as crystals, forming rare objects of interest to the collector. Collections made up of all sizes and states of completeness, from the value of $25 (or £5 sterling) to $200. Letters of enquiry or conveying orders must be post paid.—P.S.—On receipt of £5 sterling Mr. Hamblin will forward a set of iron specimens; also, native copper and silver.
Crystals as follows will be supplied at from $2 to $4 each:—Quartz, calc spar (Dog Tooth and other varieties), epidote, greenstone, prehnite (with copper), black oxide copper, analcime, chlorastrolite (found only at Isle Royale), native copper, (crystallised), calc spar (with radiated epidote), ripple marked quartz (from the metamorphic strata), and a large variety of others illustrative of the geology and mineralogy of this part of the world.
On account of convenience of remittance, the smallest collection which can be forwarded will be $25 (or £5 sterling).

Now ready, price 6d.,
GOVERNMENT INSPECTION OF COAL MINES,
TO WHICH IS APPENDED THE
ACT FOR THE REGULATION AND INSPECTION OF MINES,
which come into operation on January 1, 1861.
Also, price 2s.,
GLOSSARY OF ENGLISH AND FOREIGN MINING AND SMELTING TERMS.
Second edition, revised and much enlarged.
London: *Mining Journal* office, 26, Fleet-street, London, E.C.; and of all booksellers and newsmen.

COMPULSORY REGISTRATION OF JOINT-STOCK COMPANIES.
Now ready, price 4s., the Second Edition of
TAPPING'S EXPOSITION OF THE JOINT-STOCK COMPANIES ACTS OF 1856 AND 1857.
Designed as a PRACTICAL GUIDE for the Promoters, Directors, Shareholders, Solicitors, Secretaries, Officers, and Creditors of all kinds of Joint-Stock Companies.
Containing a Clear Exposition of the recently passed JOINT-STOCK COMPANIES ACT, 1857.
Also, full Directions for the Formation, Registration, and Incorporation, of Joint-Stock Companies, together with the Authorised Regulations for Management of the same, and all necessary forms. By THOMAS TAPPING, Esq., Barrister-at-law.
Author of the *Readwin Prize Essay on the Cost Book System*, &c., &c.
London. *Mining Journal* office, 26, Fleet-street; and all booksellers.

THE IRONMONGER, AND METAL TRADES ADVERTISER.
A Monthly Trade Circular. Entered at Stationers' Hall, and registered for transmission abroad. Office, 24, Bow-lane, London, E.C.
The *Ironmonger* is published on the last day of every month, and supplied to the trade only for the sum of 5s. per annum, post free. It contains Leading Articles, Mirror of the month, List of Contracts open, Extracts, Trade Reports, Price Currents and Statistics, Reports of Trade Meetings, &c., List of English and Foreign Patents, and Novelties (illustrated when necessary), Correspondence, Gazette, and other matters interesting to the trade, specially selected and arranged for its columns.
Manufacturers and wholesale houses will find this journal the best possible medium for bringing their articles before the trade, no expense being spared in its introduction at home and abroad, wherever the English language is spoken, and a permanent English and Foreign circulation of several thousands per month being guaranteed. Scale of charges for advertisements:—Page, 35s.; half page, 20s.; quarter page, 12s. 6d.; per word, 1d. Assistants' advertisements, not exceeding 24 words, will be inserted for 1s. each.

THE LLANMORLAIS COLLIERY COMPANY (LIMITED).

Capital £20,000, in 10,000 shares of £2 each.
10s. per share to be paid on application, and 10s. on allotment.

DIRECTORS.

A. C. HOWDEN, Esq., 71, Boundary-road, St. John's-wood, N.W.
Col. R. Y. BUSH, 55, York-terrace, Regent's-park, N.W.
Capt. J. D. MACQUEEN, Whitehall-yard, S.W.
THOS. P. AUSTIN, Esq., 35, Mark-lane, E.C.
S. W. HOOPER, Esq., 45, Fleet-street, E.C.
W. C. KIRKHAM, Esq., 15, St. Anne's-square, Manchester.

BANKERS—The City Bank, Threadneedle-street, London.
SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard.
BROKER—F. Everett, Esq., 17, Royal Exchange.
OFFICIAL AUDITOR—F. Maynard, Esq., Accountant, 19, Broad-street, Chespside. (Another to be chosen by the shareholders.)
SECRETARY—Mr. Charles Warwick.

OFFICES,—25, BUCKLERSBURY, LONDON, E.C.

This company has been formed for the working of extensive grants of coal, situate in the Gower district, nearly opposite Llanelly, South Wales.

The coal of this district is admitted to be of the very best quality, is highly bituminous, in great demand for house, gas, smiths, and manufacturing purposes.

Two large seams have been already won, and shipments can soon be made.

Detailed prospectuses can be obtained, and samples of the coal seen, at the offices of the company. Application for shares may be made to the bankers, brokers, or secretary. The application must be accompanied by a deposit of 10s. per share on the number of shares applied for. If no shares be allotted, the deposit will be returned in full.

THE AMMAN (ABERDARE) COLLIERY COMPANY (LIMITED).

Incorporated under the Joint-Stock Companies Acts, 1856 and 1857, whereby the liability of shareholders is limited to the amount of their shares.
Capital £100,000, in 10,000 shares of £10 each.
Deposit, £1 per share on application.

DIRECTORS.

The Right Hon the EARL OF KINTORE, Lord Lieutenant of Kincardineshire.
GEORGE BROCKELBANK, Esq., Greenwich (Director of the General Steam Navigation Company).
EWING P. COLQUHOUN, Esq. (Messrs. Colquhoun and Thomson), Laurence Pountney-hill.
CHARLES LEAN, Esq., Llantrisant, late of the Cwm Avon Ironworks.
WILLIAM LLOYD, Esq., J.P., Newtown, Montgomery (Director of the Oswestry and Newtown, Newtown and Llanidloes, and Mid Wales Railway Companies).
GEORGE OFFOR, Esq. (Messrs. Seymour, Peacock, and Co.), London and Liverpool.
JOHN E. PANTER, Esq., Lee Park, Blackheath.
Sir EDWIN PEARSON, F.R.S., Wimbledon, Surrey (Director of the Scottish Australian Investment Company).
JAMES LEWIS ROBERTS, Esq., J.P., Gadlys, Aberdare, Glamorganshire.
JOSEPH TILSTON, Esq., Lower Kensington-gore.
Major-General W. G. WHITE, 14, St. James's-square.

AUDITOR—George H. Jay, Esq. (Messrs. Quilter, Ball, Jay, and Co.), Moorgate-street.
SOLICITORS—Messrs. Johnston, Farquhar, and Leech, London; Messrs. Prothero and Fox, Newport, Monmouthshire.
BANKERS—London and Westminster Bank, Lothbury; West of England and South Wales Bank, Cardiff and Aberdare.
BROKERS—Messrs. Field, Son, and Wood, 7, Warnford-court; Philip Woolley, Esq., 26, Tokenhouse-yard.

Remarks on the commercial advantages which peculiarly distinguish this undertaking will be found in the following journals:—"Daily News," "Morning Post," "Daily Telegraph," "Standard," and "Morning Star" of the 12th instant; "Times," "Morning Herald," "Morning Chronicle," and "Shipping Gazette" of the 13th; "Colliery Guardian," "Money Market Review," "John Bull," "Mining Journal," "Liverpool Chronicle," "Manchester Courier," and "Liverpool Courier" of the 14th; "Observer" of the 15th, "Liverpool Journal of Commerce" of the 16th; and other London and provincial journals.

Prospectuses, surveyor's reports, forms of application for shares, and other particulars, may be obtained from the brokers, Messrs. FIELD, SON, and WOOD, 7, Warnford-court, and PHILIP WOOLLEY, 26, Tokenhouse-yard; or from the secretary, FRANCIS HAWKINS, Esq., at the temporary offices of the company, 15, Tokenhouse-yard, London, E.C.

THE CARDIGANSHIRE CONSOLIDATED MINING COMPANY (LIMITED).

Increase of nominal capital to £50,000. In 10,000 shares of £5 each.
The shareholders will not be liable beyond the amount of their respective subscriptions.
5s. per share to be paid with application, and 15s. per share on allotment.

DIRECTORS.

CHARLES COPLAND, Esq. (Messrs. Copland and Co.), Bury-street, St. Mary Axe.
JOHN KILNER, Esq., Bury St. Edmunds.
PARKE PITTAR, Esq. (Messrs. P. Pittar and Co.), 26, Gresham-street.
PERCY MARSH SHARP, Esq. (Messrs. Hancock, Sharp, and Hales), 20, Tokenhouse-yard.
(With power to add one more.)

SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard.
CONSULTING MINING ENGINEERS—Messrs. Phillips and Darlington, 26, Gresham-street.
BANKERS—London and Westminster Bank, Lothbury.
AUDITOR—Charles Eley, jun., Esq., 27, Great George-street, Westminster.
LONDON MANAGER, AND OFFICES—J. H. Murchison, Esq., No. 117, Bishopsgate-street Within.

BROKERS.

London ..... Messrs. Alexander and Lindow, 21, Tokenhouse-yard.
Manchester.... James Gorton, Esq., Newmarket Chambers.
Aberdeen..... H. C. Oswald, Esq., Marischall-street.
Exeter..... Mr. John Harris.
Dublin..... Messrs. Smyth and Du Bédat, 11, College Green.

ABRIDGED PROSPECTUS.

This company holds the celebrated lead and copper mines known as Esgair-hir and Esgair-fraith, situate in the rich mineral district of Cardiganshire, and which many years ago made enormous returns.

These mines are also on the same lode as the Dyliffe Mine, for which Mr. Bright, M.P., and his friends, gave £24,000, and having laid out £10,000 more in explorations, &c., their returns are now upwards of 200 tons of lead ore per month, which it is believed give a profit of about £1000 per month. The Cardigan Consols Mines are yet only 60 fms. from surface, and the sett extends two miles on the course of the lodes.

Applications for shares, in the form annexed to the prospectus, accompanied by a deposit of 5s. per share, may be addressed to the directors, or to the brokers. On allotment, 15s. per share additional will have to be paid, but if no shares are allotted the deposit will be returned.

Detailed prospectuses, with the reports, and forms of application for shares, may be obtained at the office, 117, Bishopsgate-street Within, E.C., or from any of the brokers. The prospectus will also be found at length in the *Times*, *Daily News*, *Morning Post*, *Economist*, *Mining Journal*, and *Limited Liability Journal*, of 30th November.

ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED), IN THE PARISH OF ST. JUST, NEAR PENZANCE, IN THE COUNTY OF CORNWALL.

Incorporated under the Joint Stock Companies Acts, 1856 and 1857.
Capital £15,000, in 6000 shares of £2 10s. each. Deposit on application 5s., and 5s. on allotment.

DIRECTORS.

JAMES WRIGHT, Esq., C.E., 42, New Bridge-street, Blackfriars, London.
Col. BUSH, 55, York-terrace, Regent's-park, London.
THOMAS COOPER SMITH, Esq., 5, Warnford-court, Throgmorton-street, London.
} Directors of the Great Wheal Martha Mining Company.
Capt. GOLDICUTT (late 60th Rifles), Barton Villas, Barnsbury, London.
WENTWORTH LASCELLES SCOTT, Esq., M.S.A., Westbourne-park Bayswater, London.
WILLIAM GREEN, Esq., Beverley-road, Hull, Yorkshire.
GEORGE EUSTICE, Esq., C.E., Hayle, Cornwall.

BANKERS—Robarts, Lubbock, and Co., 11, Mansion House-street, London. Batten, Carne, and Carne, Penzance, Cornwall.
BROKER—Alexander Young, Esq., 3, Bartholomew-lane, or Stock Exchange, City, London.
SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard, City, London.
AUDITORS—Messrs. Cooper Brothers and Co., 13, George-street, Mansion House, London.
MANAGING DIRECTOR—Mr. Thomas Cooper Smith.

OFFICES,—5, WARNFORD COURT, THROGMORTON STREET, LONDON.

This company is established for purchasing and working the extensive and valuable tin and copper mines, called the St. Just United, in the parish of St. Just, near Penzance, Cornwall, and situate in a district which is one of the most productive in the county, and has become distinguished by the rich returns and profitable results of mining operations carried on within it.

These mines lie immediately adjacent to the rich Botallack, Levant, and other mines, all making large dividends, and producing tin in the granite inland, and copper ore in the killas under the sea.

The company having been completely registered with Limited Liability, no shareholder can, under any circumstances whatever, be made responsible for a greater amount than the shares to which he subscribes.

A considerable portion of the capital has been already subscribed, and the directors will proceed to allot the shares in a short time.

Prospectuses, plans, forms of application for shares, and any other information, may be obtained of the managing director, at the offices of the company, or from ALEXANDER YOUNG, Esq., Stock Exchange, London.

ST. JUST UNITED TIN AND COPPER MINING COMPANY (LIMITED).—MR. THOS. COOPER SMITH having ACCEPTED the MANAGEMENT of this COMPANY, all future applications must be made to him, at the new offices, 5, Warnford-court, Throgmorton-street, London.

LEICESTER AND CO. (late Leicester, Brache, and Teague), CONSULTING MINING ENGINEERS AND SURVEYORS, AND GENERAL MINING AGENTS, MELBOURNE, VICTORIA, PROCURE MINING LEASES on ELIGIBLE TERMS from the GOVERNMENT of VICTORIA and NEW SOUTH WALES, on receipt of a remittance for £200, to cover costs of lease, survey and report, &c. Messrs. LEICESTER and Co. OFFER to TAKE the MANAGEMENT of MINING COMPANIES, and PROVIDE OFFICE ACCOMMODATION, for a percentage on the profits of the company.

For further particulars, apply to MR. RICHARD MIDDLETON, *Mining Journal* office, 26, Fleet-street, London, E.C.

All remittances must be made through our bankers, the Union Bank of Australia.

TO ADVENTURERS IN FOREIGN MINES.—MR. HARRY THOMAS VERRAN, of PLACENTIA, NEWFOUNDLAND, who has had considerable experience (under the tuition of his father, and in connection with many other experienced Mining Engineers) is ready to UNDERTAKE the EXAMINATION and REPORTING upon MINERAL PROPERTIES in Newfoundland, the United States, or any other country, where his services may prove useful to capitalists. The greatest confidence may be placed in Mr. VERRAN, who will use his best judgment in giving reliable information to those who may repose confidence in him.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN RE GREAT WHEAL ALFRED MINE.

TO BE SOLD, pursuant to an Order made in a Cause of Painter *v.* Keigh, dated the 13th day of November last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 15th day of January inst., at Twelve o'clock at noon precisely, 100 (5120ths) SHARES of the said defendant, of and in the said MINE.

HENRY SEWELL STOKES, Solicitor, Truro,
Agent for Roscoria and Davies, Plaintiff's Solicitors, Penzance.

Dated Registrar's Office, Truro, January 2, 1862.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

In the Consolidated Causes of PASCOE AND OTHERS v. DALE.
ORGAN v. SAME.
ALLEN v. SAME.
LANYON AND ANOTHER v. SAME.
IN RE GREAT NORTH TOLGUS MINE.

TO BE SOLD, pursuant to the several Orders made in the above mentioned Causes, and bearing date respectively the 16th day of August last, BY PUBLIC AUCTION, at Great North Tolgus Mine, in the parish of Redruth, within the said Stannaries, on Monday, the 13th day of January inst., at Eleven o'clock in the forenoon, either together or in lots, the MACHINERY, MATERIALS, and EFFECTS at and upon the said MINE or belonging thereto, or to the adventurers therein in respect thereof, particulars of which appear in hand-bills.

For viewing the same, application may be made to Mr. TONKIN, the officer of the Court in possession; and for further particulars to Mr. STOKES, Solicitor, Truro; or to Messrs. HODGE, HOCKIN, AND MARRACK, Solicitors, Truro, Agents for Mr. Downing, Solicitor, Redruth.

Dated Registrar's Office, Truro, January 2, 1862.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the ST. DENNIS CONSOLS MINING COMPANY (LIMITED), and in the MATTER of the JOINT-STOCK COMPANIES ACTS, 1856-57.—Notice is hereby given, that a PETITION for the WINDING-UP of the above-named company was, on the 24th day of December inst., presented to Edward Smirke, Esq., the Vice-Warden of the Stannaries, by William Martyn, of Beulah Villa, near Saltash, in the county of Cornwall, merchant, a creditor of the said company, and that the said petition is directed to be heard before the Vice-Warden, at No. 5, Queen-street-place, Upper Thames-street, in the City of London, the registered office of the said company, on Tuesday, the 14th day of January next, at the hour of Eleven o'clock in the forenoon. And all persons desirous of opposing the said petition are to appear on the hearing thereof at the place and time aforesaid, in person, or by their solicitors or agents in that behalf; and notice of such intended opposition is to be given, or sent, either to the secretary of the Vice-Warden or to the Registrar of the Court of the Vice-Warden, addressed to either of them, at the Registrar's office, Prince's Hall, Truro, Cornwall, on or before Saturday, the 11th day of January next.

And notice is hereby given, that copies of the said petition will be supplied to all persons entitled to oppose the said petition on application to the undersigned, and on payment of the authorised charge for the same.

GREGORY, SKIRROW, AND ROWCLIFFES, 1, Bedford-row, London.
Agents for Hodge, Hockin, and Marrack, Truro, Cornwall,
Solicitors for the petitioner.

Dated this 30th day of December, 1861.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Devon.

PURSUANT to an Order or Decree made in the Cause of Perry and Others *v.* Unsworth, the CREDITORS in respect of the SOUTH LADY BERTHA MINE, in the parish of Buckland Monachorum, within the said Stannaries, are, on or before the 15th day of January next, to COME IN and PROVE THEIR DEBTS before the Registrar of the said Court, at his office, in Truro, or in default thereof they will be excluded the benefit of the said Decree.

Dated Registrar's Office, Truro, December 31, 1861.

MINERAL PROPERTY TO LET.—TO BE LET ON LEASE, about THREE HUNDRED AND SIXTY ACRES of COAL GROUND, believed to contain the celebrated Rhondda seams of coal, together with the Aberdare steam coal measures. A large bratticed pit has been sunk on the property, to the depth of about 70 yards. The property adjoins the Taff Vale Railway, and is within half a mile of the post town of Pontypridd, Glamorganshire, and 12¼ miles from the port of Cardiff.—For terms and further particulars, apply to Messrs. BURBY and CARLISLE, solicitors, New-square, Lincoln's Inn, London, W.C.; or to ALEXANDER BASSETT, Esq., mining engineer, Cardiff, Glamorganshire.

COLLIERY.—TO LET, for such a term as may be agreed on, the NEW CHELTENHAM PIT, KINGSWOOD, near BRISTOL, now sunk to the depth of 20 fms., with the coal under 100 acres of land, or more if required, proved by boring from the bottom of the pit to exist of the thickness of 3 ft. at the further depth of 10 fathoms.

A suitable steam-engine has been erected, which, with the plant, is to be taken by the lessee at a valuation.

The works are situated at about three miles from Bristol, whither the coal can be carted at a cost of 2s. per ton.

Further information can be obtained on application to Messrs. WHITTINGTON and GRIBBLE, solicitors, Bristol; or to Mr. G. C. GREENWELL, mining engineer, Radstock, Bath.

TO TIN-PLATE MANUFACTURERS, IRONMASTERS, &c.—TO BE LET, for a term of years, as may be agreed on, with immediate possession, the EXTENSIVE TIN-PLATE and IRONWORKS, known as the DERWENT TIN-PLATE WORKS and SEATON IRONWORKS, situate near Workington, in the county of Cumberland, and in the centre of the hematite iron district.

The works include the whole of the erections, furnaces, machinery, plant, and tools requisite for the manufacture of tin-plates and sheets on a large scale, the rolls, shears, &c., being driven by a 60 horse power steam-engine, and the whole being in the most complete and efficient working order, and capable of producing 800 boxes of tin-plates per week.

The mills might with a little alteration be adapted for rolling boiler plates and bars.

There is an unlimited supply of water-power, with several wheel races, one of which is occupied by a powerful water-wheel.

The works also contain a blast-furnace, with suitable blowing machinery and heating stoves, and a number of coke ovens and other requisites.

Adjoining the premises are a commodious family residence, with large garden, a manager's house, and twelve workmen's cottages.

Coal, iron ore, limestone, &c., abound in the neighbourhood, and the works are connected with the Cockermouth and Workington Railway by means of extensive sidings.

For further particulars, apply to Mr. HENRY FLETCHER, of the Lowca Ironworks, near Whitehaven; or to Mr. JAMES LUMB, Whitehaven.

Whitehaven Castle, December, 1861.

THE TANYBWLCH SLATE QUARRY, LLANLLECHID, BANGOR, NORTH WALES.—This quarry has only very recently been opened by the owner, and although the operations have been very limited the quantity of slates obtained has been very considerable, and of superior quality.

The quarry is situated within two miles of the Penrhyn Slate Quarries, the property of the Hon. Col. E. G. Douglas Pennant, M.P., and has every facility for the conveyance the slates to the town and port of Bangor, distant four miles, and thence by rail and ship transit.

A report of the capabilities of the quarry has recently been made by an experienced practical surveyor, a copy of which will be forwarded on application to the owner of the quarry, Mrs. TAYLOR, Albion Hotel, Bangor, of whom particulars as to terms of letting can be obtained.

GREAT NORTHERN COPPER MINING COMPANY OF SOUTH AUSTRALIA (LIMITED).—Notice is hereby given that the SECOND ANNUAL GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street, London, on MONDAY, the 20th day of January next, at Two o'clock in the afternoon precisely.

The transfer books of the company will be closed on the 4th inst., preparatory to the above meeting, and will remain so closed until after the 20th day of January next.

T. HANCOCK, Manager.

1, Charlotte-row, Mansion House, London, January 1, 1862.

THE ABERNANT SILVER-LEAD MINING COMPANY (LIMITED).

Incorporated under the 19th and 20th Vic., c. 47, and 20th and 21st Vic., c. 14, the 19th day of December, 1861.
Divided into 10,000 shares of £2 10s. each.
10s. to be paid at the time of subscribing, and the balance, if required, by instalments of 5s. each.

SECRETARY—Mr. Thomas Spargo.

REGISTERED OFFICES,—224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

This valuable mining property is situate in the parish of Llanbardan, in one of the richest mineral districts of Cardiganshire. It is held under a grant from Lieutenant-Colonel Powell, at 1-16th dues, for a term of 21 years. Its area is upwards of one mile square, richly mineralised throughout, and is traversed by three rich lodes of lead ore, varying in size from 6 to 12 ft., the whole of which are open to the surface.

Prospectuses, with plans and sections of the property, and reports, may be had on application at the offices of the company.

THE GREAT DARREN SILVER-LEAD MINING COMPANY (LIMITED).

Incorporated by virtue of the 19th and 20th Vic., c. 47, and 20th and 21st Vic., c. 14.
Capital £30,000, in 10,000 shares of £3 each.
£1 to be paid at the time of subscribing, and the balance, if required, by instalments of 5s. each.

SECRETARY—Mr. Thomas Spargo.

REGISTERED OFFICES,—224 and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

This company is formed for the purpose of acquiring and developing certain rich mineral properties situate in the county of Cardigan, and known as Darran, Darren East, and Cwm Darren Mines, about six miles from the port of Aberystwith, in the centre of the richest silver mines in that county.

Prospectuses, with plans and sections of the property, and reports, may be had on application at the offices of the company.

A meeting of gentlemen interested in the development of this undertaking was held on Tuesday last, the details of which will be found in another column.

TO INVENTORS.—All INTENDING PATENTEES should PROCURE the PRINTED INFORMATION regarding PATENTS, their COST, and the MODE of PROCEDURE to be adopted, ISSUED GRATIS by the GENERAL PATENT COMPANY (LIMITED), 71, FLEET STREET, LONDON.

R. MARSDEN LATHAM, Sec.

BEDFORD IRONWORKS, TAVISTOCK.

NICHOLLS, WILLIAMS, AND CO. have generally a GOOD STOCK of SECOND-HAND MINING MATERIALS FOR SALE. They also MANUFACTURE STEAM ENGINES of every description on the newest principles. Castings and wrought-iron work made at the shortest notice. Machinery sent to all parts of the world. Steam boilers and chains warranted of the best description.

FOR SALE, a NEW and POWERFUL CORNISH CRUSHER, complete, with raft, wheel, and rolls, 30 in. diameter, with wrought-iron spindles. Also, a WATER-WHEEL, nearly new, 30 ft. high by 5 ft. wide, all iron except arms. Second-hand materials of all kinds always for disposal, at NICHOLLS, WILLIAMS, and Co.'s, Bedford Ironworks, Tavistock, Devon.

CREASE'S PATENT EXCAVATING MACHINERY for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.

Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.

Applications to be addressed to Mr. GEORGE T. CURTIS (sole agent), 17, Gracechurch-street, London, E.C.

By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Mining Journal.*

NICKEL AND COBALT REFINING, AND GERMAN SILVER WORKS, 16, OZZELL STREET NORTH, BIRMINGHAM.

STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—

REFINED METALLIC NICKEL. | OXIDE OF COBALT. [WIRE, &c.
REFINED METALLIC BISMUTH. | GERMAN SILVER—IN INGOTS, SHEET
NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX, AND CHEMICAL WORKS,

NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER.
References.—Professor Miller, King's College, London.

HALL AND WELLS, PATENTEES AND MANUFACTURERS OF SUBMARINE TELEGRAPH CORES, CABLES, &c.—TELEGRAPH CONDUCTORS INSULATED with INDIA RUBBER at £5 per mile and upwards, PARTICULARLY ADAPTED for MINING PURPOSES. Further particulars as to price of cores, cables, &c., can be had on application at 60, Aldermanbury, City, E.C.; and Steam Mills, Mansfield-street, Borough-road, Southwark, S.E.

Copper wire covered with silk, cotton, or any other material, to order.

PATENT LEVER BREAK, FOR RAILWAY WAGONS, doing away with the objectionable break rack. Can be APPLIED to EXISTING STOCK at a TRIFLING EXPENSE. Royalty moderate. Models can be seen at No. 1, Moorgate, London, E.C.; and the breaks in action at the works of the Railway Carriage Company; at the Peterboro' Station, on the Eastern Counties Railway; the Rugby Station, London and North-Western Railway; the Cardiff Docks Station, Taff Vale Railway; and at the Works, Oldbury, near Birmingham, where all communications are requested to be sent.

INCRUSTATIONS IN STEAM BOILERS.—FIRTH'S ENGINEERS' FRIEND, or BOILER COMPOSITION, is the BEST and CHEAPEST PREPARATION ever introduced for REMOVING and PREVENTING INCRUSTATIONS in STEAM BOILERS. By its use chipping, and the consequent wear and tear, is abolished, and a SAVING of FUEL EFFECTED of from FIFTEEN to TWENTY PER CENT.

LONDON AGENT,—MR. SEPTIMUS ROBINSON, 32, FENCHURCH STREET.
AGENT IN CORNWALL,—MR. THOS. FOSS, CAMBORNE.
LEEDS,—MR. J. P. C. WESTWOOD, BEESTON HILL.
A list of testimonials forwarded on application.

PATENT MOVABLE FIRE BAR COMPANY (LIMITED).

DIRECTORS.

SAML. H. BLACKWELL, Esq., Ironmaster, Dudley.
SAML. THORNTON, Esq., Merchant, Birmingham.
JONATHAN GRINDROD, Esq., C.E., Liverpool.
JOHN LLOYD, Esq., Engineer, Lilleshall.
OFFICES,—16, HACKIN'S HEY, LIVERPOOL.

WRIGHT'S PATENT BARS for LOCOMOTIVE, MARINE, and STATIONARY BOILERS, PUDDLING and OTHER FURNACES.

The proprietors have great pleasure in recommending the above as the simplest and best arrangement in use. The bars have already been adopted by some of the leading firms in the Midland Iron District, in various channel and ocean-going steamers, and the large breweries in Burton, and have, in every case, given great satisfaction.

For prices charged, apply at the company's office, Liverpool.

AGENTS WANTED; also, TENDERS from ironfounders for CASTING the BARS.

Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID FOR REMOVING AND PREVENTING INCRUSTATION IN STEAM BOILERS, LAND AND MARINE.

P. S. EASTON AND G. SPRINGFIELD,
Patentees and Sole Manufacturers,
37, 38, and 39, WAPPING WALL, LONDON, E.,
Or of their Agents in the principal towns of Great Britain and the Colonies.

PATENT BITUMINIZED GAS, WATER, AND DRAINAGE PIPES.—These PIPES POSSESS all the PROPERTIES NECESSARY for the CONVEYANCE of GAS and WATER, and also for DRAINAGE PURPOSES—viz. GREAT STRENGTH, GREAT DURABILITY, and PERFECT INOXIDABILITY, and being non-conductors are not affected by frost, like metal pipes. They are proved to resist a pressure of 220 lbs. on the square inch (equal to 500 ft. head of water), at only one-fourth the weight, and considerably cheaper than iron pipes. They are made in 7 ft. lengths, and the joinings are simple and inexpensive. These pipes have been in use in France, Spain, and Italy nearly three years, where the demand for them is very great. The opinions of the press on a public test at the Houses of Parliament, before a large number of engineers and other scientific gentlemen, may be had, with further particulars, at the office of the company, on application to Mr. ALEX. YOUNG, 14a, Cannon-street, London, E.C., where sample pipes may be obtained for trial.

THE PARAFFIN, OR MINERAL OIL SAFETY GAUGE made for the Asphaltum Company (Limited), ENABLES CONSUMERS to AVOID PURCHASING PARAFFIN or MINERAL OIL of an EXPLOSIVE and DANGEROUS KIND. Price, with a tin oil holder, 1s. 6d. each; forwarded by post upon receipt of 18 stamps.—Apply at the offices of the company, 34, Great Winchester-street, London E.C.

ALBERT AND MEDICAL LIFE ASSURANCE 7, WATERLOO PLACE, PALL MALL, LONDON, S. W.

ESTABLISHED 1838.

The business of the Medical, Invalid, and General Life Assurance Society having been amalgamated with the Albert Life Assurance Company, the united business will henceforth be carried on under the above title.

Accumulated fund exceeds	£500,000
Subscribed capital	447,180
Paid-up capital	137,000
Annual income from life premiums, upwards of	220,000

The new business is now progressing at the rate of more than £25,000 per annum.

From Prof. De Morgan's report upon the last valuation of liabilities (end of 1858), and the statements of accounts, it appeared at that time that the surplus in favour of the Albert business alone, after providing for every liability, was £192,925 2s. 11d.

HENRY WILLIAM SMITH, Actuary.
C. DOUGLAS SINGER, Sec.

BASTIER'S PATENT CHAIN PUMP APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, as its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shaft, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus sand, mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

A mining pump can be seen daily at work, at Wheal Concord Mine, South Sydenham, Devon, near Tavistock; and a shipping pump at Woodside Graving Dock Company (Limited), Birkenhead, near Liverpool.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors and others, for the use of his INVENTION.

OFFICES, 19, MANCHESTER BUILDINGS, WESTMINSTER, LONDON.
London, Oct. 10, 1859. Hours from Ten till Four. J. U. BASTIER, C.E.

SARL AND SONS, 17 and 18, CORNHILL, respectfully SOLICIT a VISIT to their magnificent ESTABLISHMENT. The ground floor is more particularly devoted to the display of FINE GOLD JEWELLERY, GOLD and SILVER WATCHES, and FINE GOLD CHAINS.

The SILVER PLATE DEPARTMENT is in the gallery of the building, and consists of every article requisite for the table and sideboard.

In the magnificent show-rooms is displayed a large and beautiful stock of ARGENTINE PLATE, the manufacture of which has stood the test of 20 years' experience.

SARL and SONS have also fitted up a separate show-room for the display of DRAWING and DINING ROOM CLOCKS of the most exquisite designs. Books containing drawings and prices may be had upon application.

SARL AND SONS, 17 and 18, CORNHILL, LONDON.

VENTILATION OF MINES.

ELLIS LEVER,
WEST GORTON WORKS, MANCHESTER,
SOLE MANUFACTURER OF THE
IMPROVED SAFETY BRATTICE,
FOR
AIR-COURSES, FLY-DOORS, AND STOPPINGS,
IN THE
WORKINGS OF FIERY COLLIERIES.

ELLIS LEVER DESIRES to INFORM the OWNERS and MANAGERS of COLLIERIES in all parts of the kingdom that THEY CAN BE SUPPLIED at a DAY'S NOTICE with a STOCK of AIR-PROOF BRATTICE or DOOR CLOTH of ANY WIDTH, and in VARIOUS QUALITIES, from SIXPENCE PER SQUARE YARD.

Several miles of the FLEXIBLE TUBING, INVENTED and MANUFACTURED by ELLIS LEVER, is now USED for the PURPOSE of VENTILATION in SINKING SHAFTS and EXPLORING DRIFTS. This TUBING is AIR-PROOF and WATER-PROOF, can be made any size, from 6 inches diameter to 3 feet diameter, in unlimited lengths. Every tube is fitted internally with hoops, 12 inches apart, which prevent their collapsing.—Prices and further information will be sent on application to
ELLIS LEVER, MANCHESTER.

BY HER MAJESTY'S ROYAL LETTERS PATENT.

BUTLIN'S APPARATUS FOR SUPERHEATING STEAM, by which means a SAVING of THIRTY PER CENT. in the CONSUMPTION of FUEL is EFFECTED, TWENTY-FIVE PER CENT. LESS WATER is REQUIRED to FEED BOILERS, a GREAT INCREASE of POWER is OBTAINED, and the BOILER is RENDERED MORE DURABLE. The above patent can be applied to any boiler, either new or old, and to every description of engine. Most extraordinary reports have been received from parties who have used it, equally satisfactory to the following letters, and any further particulars may be obtained by applying to the patentee,
W. BUTLIN, VULCAN WORKS, WESTON STREET, NORTHAMPTON.

TESTIMONIALS.

Leadenhall-street, London, E.C., July 3, 1860.

DEAR SIR,—Having applied your patent steam superheater to the boiler of our steamship, *City of Nantes*, we have great pleasure in being able to state that your apparatus effects a saving of at least 30 per cent. in the consumption of fuel, besides giving additional speed upon the screw. We do not hesitate in giving our opinion that your invention is a most important one, and one which must come into general use. We approve of your arrangements for admitting saturated steam with the superheated, to regulate the temperature at pleasure. Your plan of filling the heater with water during the time steam is being got up we think is quite a new idea, and remedies one of the great objections to superheaters generally—the rapid destruction of the tubes by the fire while steam is getting up. You are at liberty to make what use you please of this letter, as we think so valuable an invention ought to be made known to the steam shipping interest of this country. We are, dear Sir, your's truly,
W. Butlin, Esq., Northampton. LANGTON AND WILSON.

Little Houghton, Northampton, July 29, 1861.

DEAR SIR,—We have given our engine a sufficient test, both in thrashing and sawing, since the introduction into it of your superheater, to enable us to speak confidently of the great improvement made by the alteration. We believe that your advertisements do not exaggerate the excellence, in any respect, of your patent. Many respectable parties who witnessed the working of the engine are willing to bear testimony to the truth of our statements. We remain, dear Sir, yours very truly,
—— SMITH AND THURSTON.

Naseby, Northampton, Aug. 24, 1861.

SIR,—I have much pleasure in being able to state that since your patent steam superheater has been applied to my engine I find a considerable reduction in the consumption of fuel, much less water is required to feed it, and a great increase of power is obtained. I am much pleased with the alteration. —— Yours truly, L. WILFORD.

Earl's Barton.

SIR,—I am well satisfied with the alteration made in my engine, as it takes less coal and water since your heater has been introduced into it.
Yours truly, CHRISTOPHER COLEMAN.

AYTOUN'S PATENT SAFETY CAGE AND HOIST.
CHANGE OF LICENSE FEE.

The present LOW RATE of LICENSE FEE, £1 per cage, will be CONTINUED till the CLOSE of the INTERNATIONAL EXHIBITION, where facilities will be afforded to parties interested to assure themselves of the value of the invention. A FULL SIZED SAFETY CAGE will be there EXHIBITED in ACTION, and may be subjected to whatever tests parties may desire. Also, a VARIETY of MODELS, SHOWING the ADAPTATION of the SAFETY PRINCIPLE to CAGES of VARIOUS CONSTRUCTIONS, and to GUIDE RODS of IRON as well as of WOOD.

Parties having thus had an opportunity of assuring themselves of the trustworthiness of the safety cage, and of providing themselves with all the licenses they may require at a low figure, the patentee proposes, immediately on the close of the Exhibition, to raise the license fee to £6, £7, and £8 per cage, according to the weight it is calculated to carry. This will enable him to set on foot an active canvass for the introduction of the safety cage into every mining district of the kingdom, a measure plainly impossible with the present low fee of £1.

The patentee has also the satisfaction of saying that he has now made arrangements with the well-known firm, Messrs. James Tod and Son, engineers, Edinburgh, which will enable him to furnish safety cages, calculated to carry from 12 to 15 cwts. of coal or ironstone, at £10 each, and other sizes in proportion. As the carriage of a cage by rail to the central parts of England does not exceed 10s., the cage may be delivered in almost any locality for a sum not exceeding 10 guineas, exclusive of the license fee, which at present is only 1l. Coal and ironmasters, therefore, would do well, at this time, to provide themselves with one, which, on being tried in their pits and found to answer, would serve as a model for making others. By sending the order through the patentee, they will have the advantage of his personal superintendence.

To those who prefer getting them made on their own premises, working drawings or models will be sent, which will enable any ordinary workman to construct the safety cage easily.

In view of any further attempt of the Legislature to make the use of safety cages imperative, it would seem advisable to secure licenses at the present low rate for as many as are required.

Apply to the patentee, ROBERT AYTOUN, 3, Fettes-row, Edinburgh.

GOLD GETTING MACHINES, for Nova Scotia. Also, the NEW PATENT HYDRAULIC PRESS, important to shippers, packers, and seed crushers, weighing only a few hundredweights instead of tons. Can be seen at the patentee's, J. WALKER, 17, Cowper-street, City-road.

AUSTRALIA AND NEW ZEALAND
WHITE STAR EX-ROYAL MAIL CLIPPERS,
SAILING FROM
LIVERPOOL to MELBOURNE on the 1st and 20th of every month.

*** Passengers holding Victoria passage warrants will be forwarded to Melbourne by these vessels.

Ship.	Captain.	Register.	Burthen.	To sail.
MERCHANT PRINCE.....	McLAY	1752	3000	Jan. 20.

The magnificent clipper, *Merchant Prince*, is one of the largest and finest vessels in the Australian fleet. She has proved herself to be one of the fastest ships afloat, having made the passage from England to Melbourne in 72 days. Her last voyage was from Liverpool to Melbourne, port to port, in 77 days. Her accommodations for all classes of passengers are very superior. The saloon is a spacious and comfortable apartment, replete with all necessaries for the voyage.

For freight or passage apply to the owners, H. T. WILSON and CHAMBERS, 31, Water-street, Liverpool; or to GRINDLAY and Co., 124, Bishopsgate-street, and 55, Parliament-street; or SEYMOUR, PEACOCK, and Co., 116, Fenchurch-street, London.

Willox's Australian and New Zealand hand-books sent for two stamps.

INVESTMENTS IN BRITISH MINES.—MR. MURCHISON publishes a QUARTERLY REVIEW OF BRITISH MINING, giving at the same time the POSITION and PROSPECTS of the MINES at the end of each Quarter, the DIVIDENDS PAID, &c.; price One Shilling. RELIABLE INFORMATION and ADVICE will at any time be given by Mr. MURCHISON, either personally or by letter, at his Offices, No. 117, BISHOPSGATE-STREET WITHIN, LONDON, where copies of the above publication can be obtained.

OPINIONS OF THE PRESS ON MR. MURCHISON'S WORK ON BRITISH MINING, PUBLISHED IN 1856.

Mr. Murchison's new work on Britis Mines is attracting a great deal of attention, and is considered a very useful publication, and calculated to considerably improve the position of home mine investments.—*Mining Journal.*

The book will be found extremely valuable.—*Observer.*

A valuable guide to investors.—*Herapath.*

Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—*Morning Herald.*

A valuable little book.—*Globe.*

Of special interest to persons having capital employed, or who may be desirous of investing in mines.—*Morning Chronicle.*

As a guide for the investment of capital in mining operations is inestimable. One of the most valuable mining publications which has come under our notice, and contains more information than any other on the subject of which it treats.—*Derby Telegraph.*

Parties requiring information on mining investments will find no better and safer instructor than Mr. Murchison.—*Leeds Times.*

To those who wish to invest capital in British Mines, this work is of the first importance.—*Welshman.*

This is really a practical work for the capitalist.—*Stockport Advertiser.*

This work enables the capitalist to invest on sound principles; in truth, it is an excellent guide.—*Plymouth Journal.*

All who have invested, or intend to invest, in mines, would do well to consult this very useful work.—*Ipswich Express.*

Persons desirous to invest their capital in mining speculations will find this work a very useful guide.—*Warwick Advertiser.*

We believe a more useful publication, or one more to be depended on, cannot be found. *Plymouth Herald.*

Those interested in mining affairs, or who are desirous of becoming speculators should obtain and carefully peruse the work.—*Monmouth Beacon.*

With such a work in print, it would be gross neglect in an investor not to consult it before laying out his capital.—*Poole Herald.*

Every person connected, or who thinks of connecting himself, with mining speculations should possess himself of this book.—*North Wales Chronicle.*

It is full of carefully compiled and reliable information relative to all the known mines of the United Kingdom.—*Sheffield Free Press*

Mr. Murchison will be a safe and trustworthy guide, so far as British Mines are concerned.—*Bath Express.*

THE MECHANICS' MAGAZINE, and Journal of Engineering, Agricultural Machinery, Manufactures, and Shipbuilding. Published weekly, price 4d.; by post, 5d. Office, 166, Fleet-street, London, E.C.

"The 'Mechanics' Magazine' has from its establishment had an extensive circulation, and it communicates, for 4d. per week, far more valuable information, both scientific and practical, than was ever before placed within the reach of even those who could afford to pay six times as much for it."—LORD BROUGHAM.

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GAUGE COAL AND IRONSTONE WAGONS.
IN STOCK—FOR SALE OR HIRE.

RAILWAY WAGONS.—WILLIAM HARRISON AND CAMM HAVE ON HAND RAILWAY, COAL, COKE, AND MINERAL WAGONS, ON SALE OR HIRE,
AT THE ROTHERHAM WAGON WORKS, MASBRO'.

THE BIRMINGHAM WAGON COMPANY (LIMITED) HAS RAILWAY WAGONS FOR HIRE.
Apply to the SECRETARY, 3, Newhall-street, Birmingham.

THE RAILWAY CARRIAGE COMPANY,
OLDBURY, NEAR BIRMINGHAM.
MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.
NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK FOR SALE OR HIRE.
LONDON OFFICES,—No. 1, MOORGATE.

ELECTRIC TELEGRAPH CONTRACTORS SUPPLIED with MALLEABLE IRON CASTINGS to pattern.
T. SHORT AND CO., 70, LEGGE STREET, BIRMINGHAM.

RAILWAY CONTRACTORS SUPPLIED with MALLEABLE IRON CASTINGS to pattern.
T. SHORT AND CO., 70, LEGGE STREET, BIRMINGHAM.

IRON PLATE WORKERS, BRAZIERS, and GALVANIZERS SUPPLIED with MALLEABLE IRON NIPPLES for SUGAR CONES to pattern.
T. SHORT AND CO., 70, LEGGE STREET, BIRMINGHAM.

NOTICE TO RAILWAY COMPANIES.—A RAILWAY SIGNAL of a NOVEL DESCRIPTION (patented) is NOW IN OPERATION on the MANCHESTER AND ALTRINCHAM RAILWAY, which GIVES NOTICE of the APPROACH of a TRAIN HALF A MILE OFF, and, if required, can announce it at any other given distance. It is novel and simple in its construction, not a single complicated movement in it, and when laid down will not require repairs for years. A model may be seen at the *Mining Journal* office, 26, Fleet-street, London, in the course of a week, and a gentleman will shortly call on the different railway companies centering in the metropolis to give any required explanations.

TRADE MARK .....

JAMES RUSSELL AND SONS, CROWN TUBE WORKS,
WEDNESBURY, STAFFORDSHIRE.
WAREHOUSE,—81, UPPER GROUND STREET, BLACKFRIARS, LONDON, S.
The ORIGINAL INVENTORS of WROUGHT IRON TUBES for GAS, WATER, &c. LAP-WELDED BOILER TUBES, HOMOGENEOUS TUBES for BOILERS, &c. GALVANISED and ENAMELLED TUBES, SCREWING TACKLE, STEAM and WATER GUAGES, and EVERY VARIETY of FITTINGS.

JOB TAYLOR AND CO., SWAN FOUNDRY,
OLDBURY, NEAR BIRMINGHAM,
SOLE PROPRIETORS of HINTON'S PATENT CUPOLA, which CONSUMES FIFTY PER CENT. LESS COKE than any cupola yet invented. MAKERS of ALL KINDS of MACHINERY connected with the GRINDING and TEMPERING of EVERY SORT of CLAY or MARL, and for the MANUFACTURE of BRICKS, TILES, DRAIN PIPES, &c. Also, of HIGH and LOW PRESSURE STEAM ENGINES of any dimensions, and of GENERAL MACHINERY.

SHORTRIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS of HOWELL'S PATENT HOMOGENEOUS METAL PLATES for BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING the STRENGTH of STEEL with the MALLEABILITY of COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to SHORTRIDGE, HOWELL, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY and Co., 12, Haymarket, London.

CORNISH BORER STEEL.—Upwards of ONE HUNDRED AND SIXTY MINES are SUPPLIED with this STEEL, and the DEMAND for it is RAPIDLY INCREASING.—For terms, apply to R. MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.

CYANOGEN STEEL, CAST STEEL, SHEAR STEEL, and IMPROVED FOREST L BLISTER STEEL supplied to order by ROBERT MUSHET and Co., Forest Steel Works, near Coleford, Gloucestershire.
Address to the Works, Coleford.

BELL BROTHERS beg to intimate that, having become SOLE LICENSEES in the United Kingdom of PROF. DEVILLE'S METHOD of PRODUCING PURE ALUMINIUM, they are now in a POSITION to SUPPLY, from their works here, both this metal and its compound with copper, known under the name of ALUMINIUM BRONZE.—Newcastle-on-Tyne, September, 1860.

TO COAL OWNERS AND COKE BURNERS.

MACKWORTH'S PATENT COAL WASHER, OR PURIFIER.—This MACHINE will EXTRACT the HALE and ALL HEAVY IMPURITIES from SMALL COAL at a COST of TWOPENCE PER TON.—For particulars and references, apply to the makers, A. and T. FRY, Temple-gate Works, Bristol; or to Mr. Jos. RIDER, Basinghall-street, Leeds.

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH DAVEY, and PRYOR who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder.

This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.

Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON AND CO.'S PENHALLICK, POOL, near CAMBORNE, CORNWALL, and BRYMBO, near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.

For the convenience of their customers and others in the North, W. BRUNTON and Co. have recently erected a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE upon warrant that it will prove equal to, if not better than, any to be procured elsewhere.

WIRE-ROPE TESTING.

PUBLIC TEST of A. J. HUTCHINGS AND CO.'S PATENT WIRE-ROPE at LIVERPOOL, FEBRUARY 27, 1861.

[From the *Daily Post* of March 1, 1861.]

On Wednesday, the 27th of February, a series of EXPERIMENTS on WIRE-ROPE took place at the Corporation Testing Works, King's Dock. The specimens tested were manufactured by the well-known firm of A. J. HUTCHINGS and Co., of Millwall, London, the Contractors to the Lords of the Admiralty and various foreign Governments, the character of whose rope is so well known in this country, as well as all parts of the Continent. Capt. Ducraft, of H.M.S. *Hastings*, and a number of other gentlemen connected with shipping, were present to witness the experiments, all of which were considered highly satisfactory, and in every respect sustained the reputation of the manufacturers. The following are the results of the experiments:—

An 8 in. rope bore 70 tons WITHOUT BREAKING.

Circumference and breaking strain.

2¼	2⅝	3	3⅛	3⅝	4	4⅛
10¾ tons	14 tons	20 tons	27 tons	29 tons	32½ tons	45½ tons

N.B.—The 2¼, 3, and 4 in. ropes were the sizes actually tested. The remaining sizes and strains are comparative.

THE ABOVE ROPES ARE FOR COLLIERY USE.

Size. Inches.	Hutchings and Co.'s wire-rope for ships' rigging. Tested Feb. 27, 1861.	Newall and Co.'s Test of Oct. 29, 1860.	Garnock, Bibby, and Co.'s Test, Oct. 29, 1860.
2	5 tons 15 cwts.	—	—
2¼	11 „ 14 „	7 tons 15 cwts.	8 tons 16 cwts.
3⅛	16 „ 10 „	—	—
3½	22 „ 8 „	—	18 „ 5 „
3⅝	23 „ 10 „	16 „ 10 „	—
4	29 „ 10 „	18 „ 15 „	—
4½	37 „ 15 „	—	26 „ 10

N.B.—The 2, 3⅛, and 4 in. ropes were the actual sizes tested. The remaining sizes and strains are comparative.

The above tests certified by Mr. M'Donald the Superintendent of the Corporation Testing Works, Liverpool.

TEST OF WIRE-ROPE AT LIVERPOOL.—The value of Messrs. Hutchings's statement, relative to a test of their manufacture, will be properly estimated when it is known that the ropes were brought down from London specially prepared for the purpose, and not taken promiscuously from their stock, as the samples tested in October were.

The following, extracted from the *Mining Journal* of November 10, 1860, shows the relative strength of the different makers' ropes on that occasion. The samples tested were privately purchased some time previously, and spliced for testing by Newall and Co.'s workmen. The test took place in the presence of representatives from the manufacturers, reporters for the press, and a large number of gentlemen connected with mining and shipping in Liverpool:—

	SIZE OF ROPE TESTED.	
	3½ inch.	2½ inch.
Garnock, Bibby, and Co.'s broke at	18 tons 5 cwts.	8 tons 15 cwts.
R. S. Newall and Co.'s	16 „ 10 „	7 „ 15 „
A. J. Hutchings and Co.'s*	11 „ 10 „	5 „ 0 „

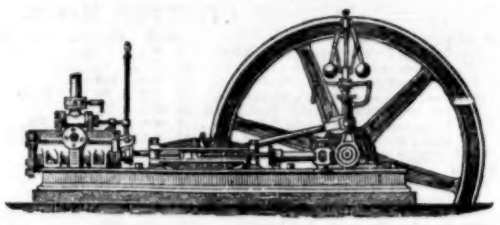
* Messrs. Hutchings's samples were from 1-16 to 3-16 over size.

From this it will be seen that the breaking point of Garnock, Bibby, and Co.'s ropes was on the average 13 per cent. over the guaranteed strain, while those of Hutchings and Co. were 30 per cent. below it.

GARNOCK, BIBBY, AND CO.,
SWAN HEMP AND WIRE-ROPE WORKS, CHAPEL STREET, LIVERPOOL.

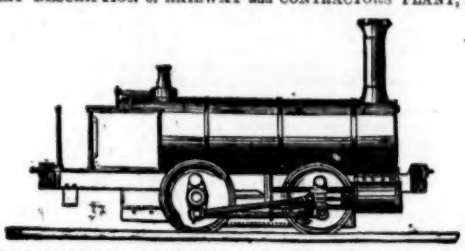
Flat and round wire-ropes of steel and charcoal iron for mines, inclines, &c., of first quality wire, and highest standard of strength.

MESSRS. E. PAGE AND CO.,
VICTORIA WORKS, BEDFORD,
AND LAURENCE POUNTNEY PLACE, CANNON STREET, LONDON
MANUFACTURERS OF



HIGH PRESSURE STEAM ENGINES, from 2½ to 30 horse power, and upwards, adapted for MINING and GENERAL PURPOSES. Prices and full particulars sent on application.

LOCOMOTIVE, STATIONARY, AND PORTABLE STEAM ENGINES.
CONTRACTORS' WAGONS, DOBBIN CARTS, BARROWS, and EVERY DESCRIPTION of RAILWAY and CONTRACTORS' PLANT, &c.

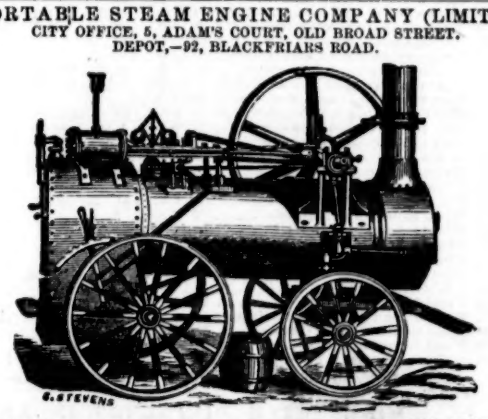


CHEAP LOCOMOTIVES for MINERAL RAILWAYS and OTHER PURPOSES.
HUGHES AND MARCH, ENGINEERS and MANUFACTURERS OF RAILWAY PLANT, and EVERY KIND of MACHINERY,
FALCON WORKS, LOUGHBOROUGH.

These engines are exceedingly useful in all cases where heavy loads have to be carried up steep inclines. They are fitted in the best style, and with every requisite. Messrs. HUGHES and MARCH, Falcon Works, Loughborough; or E. EDWARDS, Esq., C.E., 13, Beaufort-buildings, Strand, London.

MAKERS of the IMPROVED HORSE ENGINE, by which full power of the horses is given out without friction. It is applicable in all cases where horse power is required.
SECOND HAND PORTABLE STEAM ENGINES.

PORTABLE STEAM ENGINE COMPANY (LIMITED).
CITY OFFICE, 5, ADAM'S COURT, OLD BROAD STREET.
DEPOT,—92, BLACKFRIARS ROAD.



PATENT PORTABLE STEAM ENGINE, WITH REVERSING GEAR.
PORTABLE STEAM ENGINES LENT ON HIRE, from 4 to 25 horse power.

Every information can be obtained on application to Mr. DUNSFORD, at the City office, or to Mr. CRESSWELL, the company's engineer, at the depôt.

PATENT PLUMBAGO CRUCIBLES.—The crucibles manufactured by the PATENT PLUMBAGO CRUCIBLE COMPANY have been in successful use for many years by some of the largest ENGINEERS, BRASSFOUNDERS, and REFINERS in this country and abroad. The great SUPERIORITY of these melting pots consists in their capability of melting on the average 35 to 40 pourings of the most difficult metals, and a still greater number of the ordinary character, some of them having actually been worked for the EXTRAORDINARY number of 96 heats. They are unaffected by change of temperature, never crack, and become heated much more rapidly than any other kind, thereby SAVING more than FIFTY PER CENT. in fuel, time, and labour. Lasting as they do for such a length of time, the saving of waste is also very considerable.

The company have recently introduced a CRUCIBLE SPECIALLY ADAPTED for MALLEABLE IRON MELTING, the average working of which has proved to be about seven days.

CRUCIBLES for STEEL MELTING are also made, which save nearly 1½ ton of fuel to every ton of steel fused.

The Patent Plumbago Crucible Company likewise manufacture and import clay crucibles, muffles, portable furnaces, &c., stove backs, all descriptions of fire-standing goods, and every requisite for the assayer and dentist.

For lists, testimonials, &c., apply to the Patent Plumbago Crucible Company, Battersea, Works, London, S.W.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d.
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.

The best medium for mining, manufacturing, shipping, and trading advertisements in the North of England.

Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland.

WOTHERSPOON'S SCOTCH WHISKEY can now be supplied genuine as in Scotland, at WOTHERSPOON, MACKAY, AND CO.'S, 66, QUEEN STREET, E.C., in single bottles, or in quantity, price 3s. 8d. per bottle; 42s. per dozen.

SPAIN AND FRANCE.

Spain is determined to share the advantages resulting from an extended commercial intercourse with England. The Vintage Wine Company import Spanish wines at such prices as to induce customers to give the preference to sherry instead of to the light wines of France.—*Court Circular.*

Not only excellent in quality and flavour, but remarkable for cheapness—18s. per dozen for a genuine mild sherry for the dinner table.—*Sun.*

A pure, sound, and palatable wine, and far more fitted for our climate than the thin acrid clarets of France.—*Press.*

A really good sherry.—*Morning Star.*

XERES COMIDA SHERRY,
Soft, fine body, age and flavour, and genuine.
Eighteen Shillings per dozen. Pale, Twenty Shillings per dozen.

Quite equal to that for which we have been accustomed to give 60s.—*Atlas.*

Extraordinary for the money, and that no man need be ashamed to put on his table.—*Mark Lane Express.*

TERMS:—Cash only. Country orders must contain remittances. Town orders to be paid for on delivery.

CARRIAGE.—Orders of two dozen and upwards carriage paid to any railway station in England.

SAMPLES.—Samples of the wines forwarded on receipt of eighteen postage stamps.

Bottles, &c., charged at cost price, but not returnable.

MODE OF REMITTANCE.—By Post-office order, payable at the General Post-office, London; or by cheque, crossed to the Bank of London.

N.B.—In either case the order or cheque to be made payable to the Vintage Wine Company. Vintage Wine Company. Importers of Spanish wines.

WEST END OFFICES,—14, BLOOMSBURY STREET, LONDON, W.C.

COUGHS, ASTHMA, and INCIPIENT CONSUMPTION are EFFECTUALLY CURED by KEATING'S COUGH LOZENGES. Statistics show that 50,000 persons annually fall victims to pulmonary disorders, including consumption, diseases of the chest, and the respiratory organs. Prevention is at all times better than cure; be, therefore, prepared during the wet and wintry season with a supply of Keating's cough lozenges, which possess the virtue of averting as well as of curing a cough or cold. They are good alike for the young or for the aged. Prepared and sold in boxes, 1s. 1½d.; and tins, 2s. 9d., 4s. 6d., and 10s. 6d. each, by THOMAS KEATING, chemist, &c., 79, St. Paul's-churchyard, London. Retail by all druggists, &c.

DR. SMITH has just published a free edition of his valuable work, the PRIVATE MEDICAL FRIEND (116 pages), on the Self Cure of Nervous Debility, Loss of Memory, Dimness of Sight, Lassitude, &c., resulting from the errors of youth. Sent post-free to any address, on receipt of a directed envelope, enclosing two post-age stamps.—Address, Dr. SMITH, 8, Burton-crescent, Tavistock-square, London, W.C.

THE NEW FRENCH REMEDY, THERAPION, for nervousness, debility, and exhaustion. In four weeks restores manhood to the most shattered constitution, with marvellous certainty. Price 11s., or four times the quantity for 33s. Agents for England, THOMAS and Co., 7, Upper St. Martin's-lane, London, by whom it will be sent anywhere, carefully packed, on receipt of Post-office order.

THE MINING SHARE LIST.

DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
4000	Bedford United (copper), Tavistock†	2 6 8	5¼	5 5¼	12 11 6	0 3 0	Dec. 1861
240	Boscean (tin), St. Just†	20 10 0	60		35 10 0	1 5 0	Dec. 1861
200	Botallack (tin, copper), St. Just	91 5 0	250		443 5 0	2 10 0	Feb. 1860
1000	Carn Brea (copper, tin), Illogan†	15 0 0	85	75 80	269 10 0	2 0 0	Feb. 1861
200	Cefn Cwm Brwyno (lead), Cardigansh.	33 0 0	33		9 0 0	4 0 0	April, 1861
50000	Connorree (copper, sulphur) [L. £1]	1 0 0	32s.	32s.	0 0 9	0 0 9	July, 1860
2450	Cook's Kitchen (copper), Illogan	17 0 9	30	28½ 29½	0 13 0	0 5 0	Sept. 1861
12000	Copper Miners of England	25 0 0	25		7½ per cent.		Half-yrly.
350000	Ditto ditto (stock)	100 0 0	24		1 per cent.		Half-yrly.
1055	Craddock Moor (copper), St. Cleer*	8 0 0	26		6 5 0	0 7 0	Nov. 1861
867	Cwm Erfin (lead) Cardiganshire	7 10 0	21	20	6 18 0	0 15 0	Jan. 1862
128	Cwmystwith (lead), Cardiganshire*	60 0 0	200		231 10 0	4 0 0	Oct. 1861
280	Derwent Mines (sil.-lead), Durham	300 0 0	180		142 0 0	5 0 0	June, 1861
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	370	360 370	774 0 0	7 0 0	Nov. 1861
358	Dolcoath (copper, tin), Camborne*	128 17 6	550		648 10 0	8 0 0	Dec. 1861
3600	Dyffngwm (lead), Wales	12 6 6	10		0 5 0	0 2 6	Nov. 1861
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	54	50 52½	93 0 0	3 0 0	Nov. 1861
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	29	28¾ 30¾	1 10 0	0 12 6	Oct. 1861
300	East Darren (lead), Cardiganshire*	32 0 0	45		78 10 0	1 0 0	Oct. 1861
1400	Eyam Mining Co. (lead), Derbyshire	5 0 0	—		20 3 4	0 10 0	May, 1861
4940	Fowey Consols (copper), Tywardreath	4 0 0	5		41 9 3	0 2 6	June, 1860
2800	Foxdale (ld.) [L.] [2560 £25 pd., 240 £20 pd.]†		35		—	—	Dec. 1861
5000	Frank Mills (lead), Devon	3 18 6	4¼		0 14 0	0 3 0	Sept. 1861
6000	Great South Tolgus [S.E.], Redruth*	0 14 6	4¼	4 4¼	7 18 6	0 5 0	Dec. 1861
1798	Great Wheal Fortune, Breage	18 6 0	13	12 13	1 0 0	0 10 0	July, 1861
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	7	6¼ 7	1 12 6	0 7 6	Sept. 1861
1024	Herodsfoot (ld.), near Liskeard [S.E.]	8 10 0	39	37 39	16 5 0	1 15 0	Oct. 1861
1000	Hibernian Mine Company	92 6 2	27½		7 10 0	0 15 0	Sept. 1861
160	Levant (copper, tin), St. Just	2 10 0	95		1091 0 0	5 0 0	May, 1860
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	110		377 10 0	2 0 0	Oct. 1861
9000	Marke Valley (copper), Caradon	4 10 6	10	9¾ 10	1 6 0	0 5 0	Oct. 1861
5000	Mendip Hills (lead) [L.], Somerset	3 15 0	1¾		2 1 0	0 2 6	May, 1860
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	170		78 3 3	3 2 6	Nov. 1861
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	15¾	15¾	14 7 11	0 7 0	June, 1861
640	Mount Pleasant (lead), Mold	4 0 0	35		16 10 7	1 5 0	Dec. 1861
6000	New Birch Tor and Vitifer Consols	1 6 6	2¼		0 3 6	0 1 0	Sept. 1861
6000	North Downs (copper) Redruth	2 3 4	5	4½ 4¾	0 7 6	0 5 0	Dec. 1861
1366	North Grambler, Redruth	2 7 6	6		0 10 0	0 10 0	Mar. 1861
6000	North Great Work, Breage	1 8 0	1¼		0 2 0	0 2 0	May, 1860
5000	Orsedd (lead), Flintshire	0 0 8	1¼		0 9 4	0 1 3	Dec. 1861
6400	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	7¾	7¼ 7¾	36 9 6	0 5 0	Nov. 1861
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—		12 10 0	2 10 0	Sept. 1861
200	Phœnix (copper, tin), Linkinghorne	100 0 0	435		449 10 0	55 0 0	May, 1861
1772	Polberro (tin), St. Agnes	—	5		6 9 6	0 15 0	April, 1861
1120	Providence (tin), Uny Lelant† [S.E.]	10 6 7	41	40 42	61 15 0	1 0 0	Nov. 1861
16	Rhosesmor	50 0 0	—		1250 0 0	100 0 0	Quarterly.
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	325	310 315	361 0 0	5 0 0	Nov. 1861
512	South Tolgus (cop.), Redruth, Cornwall*	8 0 0	48	47½ 50	103 10 0	1 0 0	Nov. 1861
496	South Wheal Frances, Illogan* [S.E.]	18 18 9	117½	113 115	357 5 0	1 0 0	Nov. 1861
280	Spearne Moor (tin, copper), St. Just	31 17 9	45		9 15 0	1 0 0	June, 1861
940	St. Ives Consols (tin), St. Ives†	8 0 0	29	26 28	484 10 0	0 10 0	Nov. 1861
9600	Tamar Con. (sil.-ld.), Beeralston [S.E.]	4 10 0	1¼	1 1¼	5 6 0	0 2 6	Jan. 1861
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	8	7¾ 8	10 18 6	0 5 0	Dec. 1861
572	Trelyon Consols (tin), St. Ives	11 10 0	16		7 0 0	0 10 0	Sept. 1860
200	Trumpet Consols (tin), near Helston	57 10 0	100		53 0 0	1 0 0	Aug. 1861
1024	Wendron Consols (tin), Wendron	11 13 10	11	10½ 11	8 15 0	1 0 0	Jan. 1861
6000	West Basset (copper), Illogan [S.E.]	1 10 0	14½	14 14½	22 0 0	0 5 0	Sept. 1861
60	West Burton Gill (lead), Yorkshire	50 0 0	—		14 10 0	3 0 0	June, 1861
1024	West Caradon (cop.), Liskeard [S.E.]*	5 0 0	49	46½ 47½	99 11 3	1 0 0	Nov. 1861
256	West Damsel (copper), Gwennap	37 0 0	52½	43 45	45 0 0	1 0 0	May, 1860
6400	West Fowey Consols (tin and copper)	7 10 0	3¾		0 14 0	0 2 0	May, 1861
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	295	270 280	330 0 0	8 0 0	Dec. 1861
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	86	86 88	576 10 0	2 0 0	Dec. 1861
256	Wheal Buller (cop.), Redruth* [S.E.]	5 0 0	80		929 0 0	2 0 0	May, 1861
2900	Wh. Clifford Amalgamated (cp.), Gwen.	30 0 0	31	28 30	26 0 0	10 0 0	Oct. 1861
2000	Wheal Falmouth and Sperries	2 5 0	8		0 10 0	0 10 0	Feb. 1861
128	Wheal Friendship (copper), Devon	50 0 0	90		2400 10 0	5 0 0	Feb. 1861
512	Wheal Jane (silver-lead), Kea	3 10 0	18		11 10 0	1 0 0	Oct. 1861
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	1 7 2	6¼		8 0 0	0 10 0	Sept. 1860
4800	Wheal Ludcott (lead), St. Ive	2 10 8	2⅜	2¼ 2½	1 12 0	0 4 0	Oct. 1861
896	Wh. Margaret (tin), Uny Lel. [S.E.]†	9 17 6	41	40 41	70 0 0	1 0 0	Nov. 1861
100	Wheal Mary (tin), Lelant	36 2 6	440		280 5 0	7 0 0	June, 1860
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]†	8 0 0	16¾	16 17	54 17 6	0 10 0	Dec. 1861
80	Wheal Owles, St. Just, Cornwall	70 0 0	300		285 13 0	5 0 0	Nov. 1861
396	Wheal Seton (tin, copper), Camborne	58 10 0	122½	122 124	133 5 0	1 10 0	Dec. 1861
5000	Wicklow (copper) [L.], Wicklow	5 0 0	54	53¾	43 17 6	2 0 0	Oct. 1861

[* Dividends paid every two months. † Dividends paid every three months.]

MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
700	Aberdovey (silver-lead), Merioneth	1 10 0	30		0 10 0	0 10 0	Mar. 1859
5120	Alfred Consols (cop.), Phillack [S.E.]	3 3 6	⅝	½ ⅝	20 3 0	0 2 6	April, 1859
1624	Balleswidden (tin), St. Just	12 1 10	12		12 5 0	0 5 0	Jan. 1854
1200	Brightside & Froggatt Grove, Derbysh.	3 0 0	3½		3 0 0	3 0 0	April, 1856
200	Brynford Hall (lead), Flintshire	18 10 0	25		14 0 0	2 10 0	Oct. 1860
2048	Carnyorth (tin), St. Just	3 15 0	1¾		0 19 6	0 2 0	Sept. 1860
2500	Central Minera (lead) [L. £5]	0 15 0	5½		0 4 0	0 4 0	Sept. 1859
6000	Charlotte United, Perranuthnoe	2 13 2	21s.	¾	0 13 0	0 1 6	Sept. 1859
2000	Collacombe (copper), Lamerton	5 5 0	12		3 5 0	0 8 0	Dec. 1857
256	Condurrow (cop., tin), Camborne	20 0 0	67½	60 65	85 0 0	2 0 0	June, 1857
256	Copper Hill (copper) Redruth	48 0 0	102½	100 102½	2 10 0	2 10 0	Sept. 1859
4076	Devon and Cornwall (copper)	5 11 3	6		0 10 0	0 2 6	Feb. 1859
672	Ding Dong (tin), Gulval	39 2 6	15		16 7 6	1 10 0	Mar. 1857
2800	Drake Walls (tin, copper), Calstock	2 1 0	19s.	17s. 19s.	0 13 6	0 2 0	Sept. 1857
2048	East Falmouth (sil.-ld.), Kenwyn, Kea	3 5 0	¼		0 7 6	0 2 6	Jan. 1858
128	East Pool (tin, copper), Pool, Illogan	24 5 0	240		305 0 0	2 10 0	Aug. 1858
2048	East Wheal Lovell (tin), Wendron	2 13 6	—		0 5 0	0 5 0	July, 1859
6000	General Mining Co. for Irel. (cop., ld.)	4 0 0	5⅝	5⅝	1 0 8	0 3 3	June, 1853
486	Grambler and St. Aubyn (cop.) [S.E.]	48 10 0	19	16 18	23 0 0	1 0 0	July, 1860
119	Great Work (tin), Germoe	100 0 0	110		221 10 0	7 10 0	Feb. 1857
200	Herward United (lead), Flintshire	40 0 0	10		3 0 0	1 10 0	July, 1860
6000	Hingston Down Con. (cop.), Cals. [S.E.]	4 19 0	3⅝	3⅜ 3⅝	2 16 0	0 2 6	Nov. 1856
5000	Kelly Bray (lead, copper), Callington	4 8 0	21s.		0 6 0	0 2 0	Feb. 1860
20	Laxey Mining Company, Isle of Man	100 0 0	1200		1420 0 0	50 0 0	June, 1857
470	Newtownards Mining Co., Co. Down	50 0 0	35		56 0 0	1 0 0	Sept. 1858
700	North Roskear (copper), Camborne	18 0 0	20	21 23	157 0 0	4 0 0	Sept. 1853
512	Rosewarne United (cop., tin), Gwinear	19 6 4	20	17 18	38 10 0	1 0 0	Sept. 1860
12000	Sortridge Con. (cop.), Whitchurch [S.E.]	0 16 0	13s.	11s. 12s.	0 10 0	0 2 6	July, 1857
128	South Crinnis (copper), St. Austell	19 0 0	285		60 0 0	20 0 0	June, 1855
20000	St. Day United (tin and cop.), Redruth	2 7 0	¾	¾	0 3 6	0 1 0	Feb. 1858
6000	Tolvadden (copper), Marazion	0 6 0	2		0 13 6	0 3 0	Mar. 1860
20000	Vale of Towy (lead), Carmarthen [S.E.]	0 13 6	¼		0 5 9	0 1 0	July, 1858
1024	West Providence (tin), St. Erth	16 15 0	3¾		33 1 9	0 10 0	April, 1857
240	Wheal Bal (tin), St. Just	15 0 0	16		4 0 0	1 0 0	Feb. 1859
4096	Wheal Edward (cop.), Calstock [S.E.]	7 7 6	3	2¼ 2¾	0 5 0	0 5 0	Mar. 1858
1024	Wheal Grylls (tin), Perranuthnoe	2 4 0	14¼	13¾ 14¼	1 12 0	0 7 6	Nov. 1859
5000	Wheal Kitty (tin), St. Agnes	4 16 6	1		0 18 6	0 2 0	July, 1860
345	Wheal Lovel (tin), Wendron	33 0 0	7		31 0 0	1 0 0	Sept. 1856
1024	Wheal Margery (tin, copper)	15 13 0	9		0 10 0	0 10 0	May, 1860
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	17	16 17	43 15 0	1 0 0	Oct. 1860
1022	Wheal Tremayne (tin, cop.), Gwinear	13 2 6	5		10 2 6	0 7 6	Jan. 1854

FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
2484	Burra Burra (cop.), South Australia	5 0 0	116		265 0 0	5 0 0	June, 1861
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	36		97 12 0	1 0 0	July, 1861
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	8		6 8 0	0 5 0	Jan. 1861
15000	East Indian Coal, Calcutta [L.]	10 0 0	10		7½ per cent.		Yearly.
70000	English and Australian [S.E.]	5 0 0	3¼		1 5 0	0 2 6	Aug. 1861
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	24		18 5 0	1 0 0	June, 1861
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	2½	2 2¾	0 8 0	0 2 0	June, 1861
15000	Linares (ld.), Pozo Ancho, Spain [S.E.]	3 0 0	8		8 6 2	0 3 4	July, 1861
10000	Lusitanian (of Portugal) [S.E.]	2 0 0	2¼		0 18 9	0 1 6	Aug. 1861
103815	Mariquita and New Granada [S.E.]	1 0 0	¼		0 9 6	0 1 6	July, 1859
100000	Port Phillip (gold), Clunes [S.E.]	1 0 0	1½	1⅜ 1⅝	0 4 0	0 1 0	July, 1861
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	50	51 53	46 5 0	3 0 0	Dec. 1861
20000	West Canada Mining Company [L.]	1 0 0	1¼		0 2 0	0 2 0	June, 1860

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends	Per Share.	Last Paid.
10000	Alten and Quænangen Uni. (cop.) [L. £5]	4 10 0	3		4 5 0	0 15 0	Nov. 1853
10000	Gt. Barrier Land, Min., &c., N. Ze. [L. £5]	4 10 0	3½		15 per cent.		May, 1859
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	4		1 0 0	1 0 0	June, 1855
42174	Unit. Mexican (sil.), Mexico [S.E.] Av.	28 5 0	8½	8¼ 8¾	1 16 6	0 4 0	Feb. 1853

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
20000	Australian (copper), South Australia [S.E.]	7 7 6	1		Sept. 1858
75000	Bon Accord, South Australia (copper) [L. £1] [S.E.]	0 17 6	⅜	⅜ ½	Dec. 1860
6000	Central American (silver) [L.]	5 0 0	12		Feb. 1859
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—		Jan. 1859
60000	Clarendon Consols (copper), Jamaica [S.E.]	0 17 6	⅜		Jan. 1861
10000	Copiapo Smelting [L.], Chili	10 0 0	8¼		Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	1¼	1 1¼	Fully paid.
25000	East del Rey, Brazil [L. £3]	1 0 0	1⅜	1⅜ 1⅝	Sept. 1861
80000	East Kongsberg Native Silver Mining Co. of Norway [L. £5]	1 0 0	¾		April, 1861
30000	Ellerslie and Bardowie, Jamaica	0 18 0	1½		July, 1859
8000	English and Canadian Mining Company [L.]	5 0 0	—		Fully paid.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	2¼		Fully paid.
30000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 0 0	1⅜		
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—		Fully paid.
50000	Imperial Thessalian (lead, &c.), Thessaly [L. £2]	0 10 0	¾		June, 1860
30000	Lagunazo (sulphur, copper), Portugal [L. £1]	0 15 0	½		Dec. 1861
60000	New Granada (gold), South America [S.E.]	1 0 0	¼		Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiburg	1 0 0	1		Nov. 1858
60000	North Rhine Copper of South Australia [L. £1] [S.E.]	0 15 0	⅝		Nov. 1861
15000	Pachuca Silver Mining Company, Mexico [L. £1]	0 10 0	—		April, 1861
80000	Scottish Australian Mining Company [L. £1]	0 10 0	1½	1⅛ 1⅜	Nov. 1858
15000	South Europe Mining Company, Spain [L. £5]	3 0 0	—		May, 1860
50000	St. John's United (copper, lead), Newfoundland [L.]	1 0 0	⅜		Fully paid.
45000	Victor Emanuel, Italy [L.] [20,000 Pref. Shares, 5s. pd., 25,000 £1 pd.]		1⅝		
1000	Western Africa Malachite (copper) [L.]	110 0 0	—		Oct. 1859
12000	Wheal Ellen, South Australia [L. £5]	4 0 0	4¼		July, 1861
35425	Wheal Jamaica (copper)	1 0 0	18s.		Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	11s.	⅜ ⅝	Fully paid.

PROGRESSIVE MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4825	Abbey Consols (ld.) Cardigan.	2 7 0	1		Nov. 1860
1000	Allt-y-Crib (lead) [L. £5]	2 8 6	2		June, 1861
10000	Angarrack (copper), Phillack	1 1 6	1⅛		June, 1859
1000	Ashburton United (cop., tin)	14 0 0	14¾		Oct. 1861
10000	Bampfylde (copper), Devon	0 15 0	4		Aug. 1860
4000	Bedford Consols (copper)	2 0 6	3s.	1s. 3s.	Oct. 1861
2000	Berehaven (copper), Ireland	1 0 0	1¼		
6000	Bickerton (copper) [L.]	1 0 0	3½		Sept. 1861
7500	Bickleigh Vale Phœnix [L.]	2 0 0	2¼		Fully paid.
200	Billins (lead) [L. £30]	20 0 0	20	18 20	Feb. 1861
10000	Boriase Con. (tin), St. Just [L.]	1 0 0	—		Fully paid.
1248	Boscaswell (tin), Penzance	6 5 0	8		Dec. 1860
2280	Boscundle (tin, cp.), St. Austell	6 15 0	4		Sept. 1860
160	Bosorne & Bollowall, St. Just	6 5 0	10		Dec. 1860
5000	Bottle Hill (tin), Plympton	1 0 0	14s.		
12000	Brea Con. (tin), St. Ives [L. 30s.]	1 3 0	22s.		Oct. 1861
5000	Bronfloyd (ld.), Cardigan. [L.]	2 4 0	4½		Nov. 1861
112	Bron-Haulog (ld.), Denbighsh.	20 0 0	20		No call.
5120	Brynambor (ld.), Cardigansh.	1 5 0	2¼		Oct. 1861
500	Bryn Gwiog (lead), Flint	5 0 0	27½	26 27	Oct. 1861
2000	Bryntail, Llanidloes, Montgo.	5 7 0	4		Aug. 1861
5850	Budnick Consols (tin), Perran	1 18 0	⅜		Dec. 1861
6380	Buller and Basset Unit. (cop.)	3 7 6	1⅜		Oct. 1861
2448	Bwlch (sil.-ld), Cardiganshire	4 9 0	2¾		Nov. 1860
4096	Calstock Consols (copper)	5 10 0	½		Dec. 1860
915	Calvadnack, Wendron	18 5 0	7½		Mar. 1861
1000	Camborne Consols (copper)	16 10 0	8		June, 1861
4600	Camborne Vean & Wh. Francis	7 17 4	2	1⅝ 1⅞	Oct. 1861
914	Caradon Cons. (cop.), St. Cleer	23 7 0	12½		Dec. 1861
1000	Cardigan Consols [L. £10]	7 0 0	9		Mar. 1861
916	Cargoll (silver-lead), Newlyn	15 5 7	15		Sept. 1860
2580	Carmarthen United	5 0 0	3		Fully paid.
6000	Carn Camborne	0 7 0	1	¾ ⅞	May, 1861
4370	Carnewas (ld., cop.), Mawgan	1 3 0	¾	¾	June, 1861
3000	Carn Vivian (tin, cop., lead)	2 1 6	2½		Nov. 1861
7000	Carrack Dews	2 16 0	1		April, 1861
1056	Carvannall (cop.), Gwennap	21 11 7	3		Dec. 1860
10000	Carysfort (cop., ld.) [L. £2½]	0 10 0	8s.		Mar. 1859
10000	Castleward, Ireland [L. £1]	0 15 0	15s6d.		Mar. 1861
2500	Cefn Cilcen (lead), Flintshire	1 5 0	1		Sept. 1860
984	Clijah & Wentworth (tin, cp.)	28 0 6	2		May, 1861
6000	Clinton and Edgecombe United	1 0 0	1⅛		Oct. 1860
3135	Coed Mawr Pool (lead) [L.]	4 7 0	4		June, 1861
2560	Colomendy (lead), near Mold	1 0 0	21s.		No call.
5000	Cornubia (tin), Roche	1 0 0	1¼		Oct. 1861
10000	Craigton (ld.) [L. £1], Kirkcud.	0 10 0	¾		June, 1859
876	Crane (copper), Camborne	11 0 0	8	7 8	Nov. 1861
30000	Craven Moor (ld.), Yorkshire	0 10 0	¼	3s. 5s.	No call.
12000	Crelake (cop.), Tavistock	—	3		No call.
8000	Crookhaven (cop.) [L. £2½]	1 0 0	6s. 6d.		Mar. 1861
2000	Crowlwm (lead), Llanidloes	1 10 0	⅞		No call.
6000	Crowndale (cop.), Tavistock	0 11 0	3		Nov. 1858
6000	Cuddra (cop., tin), St. Austell	2 9 0	2¾		Nov. 1861
31000	Dale, North Staffordshire [L.]	1 0 0	1		Fully paid.
4817	Devon and Courtenay (cop.)	1 11 0	11s.		Oct. 1861
5000	Devon Great Wheal Ellen	2 0 0	—		Mar. 1861
12000	Dev. New Copper Co. [L. £2]	—	2		
12000	Devon Union (copper) [L. £1]	0 15 0	¾	⅝ ¾	Oct. 1861
4566	Devon Wheal Buller (copper)	3 15 0	¾		Dec. 1861
1000	Durio (tin), Lelant	6 12 0	7½		Mar. 1861
2000	Dolcoath United [L. £5]	1 0 0	2¾		June, 1860
3000	Duita (tin) [L. £1]	—	1		
244	Eaglebrook (lead.), Cardigan.	77 10 0	16		Oct. 1861
600	East Abraham, Crowan	7 10 0	7¾		Oct. 1861
4096	East Alfred Consols (copper)	3 19 11	1¼	23s. 26s.	Dec. 1861
3000	E. Beam (tin), St. Aus. [L. £2]	0 15 0	2½		Nov. 1861
6000	E. Bertha Con. (cop.), Tavist.	0 17 0	1⅛		July, 1861
6000	East Budnick and Mount	0 10 0	7s.	2s. 4s.	Jan. 1861
6000	East Carn Brea (cop.) Redruth	3 11 0	10	10 10¼	Oct. 1861
6400	East Crinnis and South Par.	2 11 6	2		Sept. 1861
6000	East Damsel	1 10 0	1¾		
4000	East Devon Gt. Consols (cop.)	0 16 6	2	1¾ 2	Dec. 1861
4000	East Fowey (cop.) [L. 50s.]	1 5 0	1¼		June, 1861
6000	E. Grenville (cop.), Camborne	0 19 6	1¾	31s. 33s.	Oct. 1861
4000	E. Gunnis Lake & S. Bedf. (cp.)	6 10 6	1¾	1¾	Oct. 1861
12000	East Mona (cop., &c.) [L. £1]	0 5 0	—		May, 1861
8000	East Polberro, St. Agnes	0 5 0	¼		May, 1861
4096	E. Providence (tin), Uny Lel.	2 8 5	2½		June, 1861
6000	E. Releath (tin, cop.), Wendron	0 1 0	1		Aug. 1860
5000	E. Rosewarne (cp., tin), Gwin.	2 12 0	1¼	1¼	Sept. 1861
1122	East Seton, Camborne	0 3 0	½		Oct. 1861
256	East Tolgus (copper), Redruth	83 0 0	30		Oct. 1861
1000	E. Trefusis (cop.), Gwennap	7 14 7	1		Sept. 1861
1024	E. Treskerby (cop.), Redruth	3 10 0	2		July, 1861
1190	E. Wheal Agar (cop.), St. Cleer	8 7 0	2¾		July, 1861
6000	E. Wh. Ellen (sil.-ld.), St. Ive	0 1 0	⅜		July, 1860
4000	E. Wh. Russell, Tavis. [S.E.]	7 7 0	3¾	2¾ 3	Dec. 1861
5700	Exmouth (sil.-ld.), Christow	5 19 0	1¾		Nov. 1861
6000	Fowey and Par Uni., St. Blazey	0 10 0	1⅜		Nov. 1860
5000	Fursdon (cp.), Okeham. [L. 30s.]	1 7 6	2½		Oct. 1861
6000	Furze Hill Wood Cons., Buckl.	0 7 0	1⅛		Dec. 1861
114	Garden (tin), Morvah	22 0 0	24		June, 1861
1000	Garreg (lead), Flint	4 10 6	¼		Nov. 1861
4000	Gawton (copper), Tavistock	1 13 0	½	½	Oct. 1861
1024	Gelliffowlier (ld.), Holywell	0 2 6	5s. 6d.		June, 1861
6000	Gernick (copper), Crowan	0 12 0	¼		Dec. 1861
4892	Goginan (silv.-ld.) [1900 £12½, 2992 £1]		2		July, 1860
6144	Gonamena (copper), St. Cleer	2 15 0	1¼		Dec. 1861
2000	Goonzion, St. Neot	0 2 6	4s.		Feb. 1861
5000	Great Brigan	3 7 0	2½		June, 1861
4096	Great Caradon (cop.), St. Ive	1 12 0	¾		Nov. 1861
6000	Gt. Crinnis (cop.), St. Austell	2 9 0	1¼	1¾	Oct. 1861
6000	Great North Downs	1 0 0	1¼	1½	Dec. 1861
10104	Great Onslow Cons., Camelfd.	3 10 9	¾		Dec. 1860
6000	Gt. Retallack (sil.-ld., blende)	1 9 0	14s.		Oct. 1861
47000	Gt. Tregune Con. [40,000 £1¼, 7000 £1¼ pd.]		—		
10000	Great Treveddoe (copper)	0 14 0	23s.		Aug. 1861
6000	Gt. Tywarnhaile (cp.), [L. £5]	3 0 0	3		Jan. 1861
5120	Great Wheal Alfred [S.E.]	14 1 2	6s.		July, 1861
8730	Great Wheal Baddern (tin)	5 13 0	¾		Oct. 1861
6000	Gt. Wh. Busy (cop., tin), Ken.	18 0 0	5¾	5½ 6½	Mar. 1861
12500	Great Wh. Martha (cop.) [L.]	1 0 0	1¼		Fully paid.
10240	Gunnis Lake (Clitters' Adit)	0 2 0	3¼		Mar. 1861
5000	Gurlyn (cop., tin), St. Erth	1 14 3	⅞		Oct. 1861
8634	Gwydyr Park Con., Llanrwst	0 15 6	9s.		Oct. 1861
6400	Harwood (ld.), Durham [L. £1]	0 3 6	⅜		July, 1861
7219	Hawkmoor (tin, cop.) Calstock	2 19 6	¾		Oct. 1861
10000	Holmbush [5000 £5 2s. pd., 5000 5s. pd.]		—		Sept. 1860
6000	Huckworthy Bridge (copper)	0 19 6	¼		Oct. 1861
40	Imperial Silver-Lead, Dolgelly	25 0 0	30		Mar. 1861
6000	Keswick (lead), Portinscale	5 0 0	1¼		July, 1861
6000	Lady Bertha (cop.) [S.E.]	1 12 6	14s.	11s. 13s.	July, 1861
3000	Lady Eliza (ld.), Carm. [L. £3]	2 8 0	¾		June, 1861
1019	Leeds & St. Aubyn (tin, cop.)	15 12 3	4		Mar. 1861
963	Lelant Cons. (tin), Uny Lelant	32 10 0	2½		Mar. 1861
1000	Llanfair (silver-lead) [L.]	6 0 0	6		Fully paid.
2000	Llywernog (ld.), Card. [L. £3]	1 0 0	1⅜		Sept. 1861
500	Long Rake (lead), Flint	11 0 0	14½	13½ 14	Nov. 1861
2000	Lower Park Denbighshire [L.]	4 0 0	18s.		
6000	Maudlin Mines	—	2½		
4540	Merllyn (lead), Flint	3 12 6	10s.		Nov. 1861
22000	Merryfield (lead) [L.]	0 12 0	4s.		May, 1860
3400	Michell (lead), Flint	0 2 6	9s.		Nov. 1861
16000	Mold (lead), Flints. [L. £1]	0 17 0	⅞		Jan. 1860
6411	Molland (cop.), S. Moulton	2 8 0	2s.		July, 1861
5000	Nance Valley	0 5 0	1		Aug. 1860
1024	Nangiles (tin, copper), Kea	5 0 0	3½	4¾ 5¼	Dec. 1861
5000	Nanteos and Penrhiw [L. £4]	3 6 0	—		June, 1861
2400	Nant-y-Iago (ld.), Merioneth	3 0 0	2½		Mar. 1861
250	Nanty Mines (ld.), Montgom.	20 0 0	—		Fully paid.
6400	Nether Heath (lead), Dufton	0 15 6	¼		April, 1860
6400	N. Crow Hill (ld.), St. Stephen	2 0 6	1⅛		Oct. 1861
4540	New E. Wh. Russell, Tavistock	0 4 0	⅛		Aug. 1861
6000	New Treleigh Cons., Redruth	1 11 0	1⅜		Oct. 1861
2000	New Wheal Clifford (copper)	0 6 0	¾		Mar. 1861
6144	New Wheal Frances, Crowan	0 18 6	8s.		Nov. 1861
1024	New Wheal Hender, Crowan	2 10 0	3		June, 1861
400	New Wh. Seton (cop.), Camb.	13 10 0	42	41 42	May, 1861
2300	New Wh. Vor & E. Wh. Metal	9 0 0	—		July, 1861
2500	N. Wh. Vaddon (tin), Marazion	1 2 6	1¼		Nov. 1861
6000	Nidderdale (ld.), Yorks. [L. £1]	0 15 0	¾		Jan. 1861
90	N. Budnick (tin, ld.), Perranz.	1 10 0	40		No call.
4500	No. Budnick and West Mount	0 5 0	⅜		
1024	North Buller (cop.), Redruth	21 7 6	3½	3½	Nov. 1861
6000	Nor. Clifford (cop.), Gwennap	0 5 0	⅝		Nov. 1860
4000	North Cornwall (Endellion)	—	⅜		No call.
20000	North Devon (sil.-ld.) [L. £1]	0 8 0	11s.		Oct. 1861
5000	N. Dolcoath (cop.), Camborne	2 4 6	¾		Aug. 1861
1000	North Fortescue	1 14 0	2		Oct. 1861
2500	North Frances, (cop.) [S.E.]	13 5 0	3½	2¼ 3	June, 1861
6000	N. Hafod (sil.-ld.), Car. [L. £2]	0 10 0	—		Sept. 1861
8000	N. Hallenbeagle (tin, cp.) [L.]	0 12 6	1⅛		Oct. 1861
2000	North Jane (tin, silver-lead)	3 5 0	2¾		Sept. 1861
6000	North Kit Hill (tin, copper)	0 2 6	⅛		Sept. 1861
6000	N. Laxey (ld.) I. of Man [3600 £2, 2400 £1¼]		1⅛		June, 1861
2000	N. Levant (tin, cop.), St. Just	6 16 6	6		Aug. 1861
10000	North Minera (lead) [L.]	1 0 0	20s.	18s. 20s.	April, 1860
6000	North Porthilly (silv.-lead)	—	⅛		Sept. 1861
4096	North Rosewarne, Gwinear	0 4 6	4s. 6d.		Dec. 1860
5000	N. Trelother (sil., cp.), Padstow	1 0 0	1¼		Feb. 1860
848	N. Treskerby (cop.), St. Agnes	10 3 9	20	18 20	Dec.
6000	N. Wh. Basset (cop., tin) [S.E.]	2 3 0	3	2¾ 3	Dec.
1024	North Wheal Busy (cop., &c.)	8 17 7	4		Sept.
5610	North Wheal Crofty [S.E.]	1 19 0	2	1½ 1¾	Oct.
6144	N. Wh. Robert, Samp. Spiney	2 12 11	1	17s. 19s.	July,
4108	North Wheal Trelawny (lead)	3 2 6	¼		Oct.
5900	North Wheal Vor (tin), Breage	3 0 0	—		June,
4000	N. Wrey (ld.), St. Ive [L. £2]	0 14 6	1½		Oct.
4096	Okel Tor (lead), Calstock	5 6 6	2½		Sept.
600	Old Tolgus United (cop.) Redr.	44 18 0	10		Nov.
800	Pant-y-Buarth (ld.) [L. £10]	6 0 0	20		Mar.
200	Pant-y-Pwydn (ld.), Flintshire	10 0 0	20		Sept.
8465	Pedn-an-drea United (tin)	3 7 6	⅜		Oct.
3200	Pelyn Wood (cop.), Lostwithiel	3 7 6	⅝		Sept.
12000	Pencraig United (ld.) [L. £1]	0 7 6	—		Oct.
5000	Pendeen Consols, St. Just	3 12 0	4	4½ 4¾	Aug.
1000	Pengenna (ld., sil.), St. Kew	4 10 0	6¾		May,
800	Penhale Moor (tin, copper)	4 5 0	5		Sept.
5000	Penhalls (tin), St. Ann's	1 4 0	5½		Jan.
6000	Penrait (lead), Merioneth	2 0 0	2¼		
200	Pentre Lygan (lead) [L. £30]	20 0 0	15½		Mar.
4000	Polgear Mines, Wendron	1 3 0	⅛		Nov.
6000	Polhigey Moor (tin), Wendron	1 0 0	1¼		Sept.
944	Praed Consols (tin), Lelant	3 13 3	2½		Sept.
6400	Prideaux Wood (tin, cop.)	3 12 0	16s.		May,
512	Polbreen (tin), St. Agnes	8 0 0	8		Aug.
6000	Prosper Uni. (tin, cp.), St. Hilary	3 0 0	46s.	2 2¼	Oct.
11789	Redmoor (cop., tin), Callington	0 8 6	6s.	4s. 6s.	Oct.
6000	Releath (tin, cop.), Crowan	1 0 0	2¼		Oct.
2500	Rhoswydol and Bacheiddon	12 5 0	7½		Oct.
3000	Rhyscog (silver-lead) [L. £5]	1 0 0	1		Mar.
20000	Ribden [L.] [15000 £1, 5000 £½ pd.]		—		
10000	River Tamar Copper [L.]	1 0 0	1		Fully p
6000	Rosewall Hill & Ransom Utd.	2 16 0	2½	2⅜ 2⅝	Mar.
4096	Rosewarne Consols (copper)	3 7 6	2½		Nov.
5000	Round Hill (cop., ld.), Salop	2 5 6	⅝		Mar.
2000	Scorrier Con. (tin, cp.), St. Agnes	3 0 0	1⅜		Nov.
10000	Sigford Con. (cop., tin) [L. £1]	0 13 0	1⅜		July,
100	Silver Rake (lead) [L. £20]	5 0 0	9		Jan.
15000	Silv. Vein, St. Winnow [L. £1]	0 7 6	2½		Nov.
6000	Smith's Wood (tin, cp.) [L. £2]	1 6 0	3¼		Oct.
512	South Basset (cop.), Gwennap	12 0 8	13		Aug.
100	South Bryn Gwiog	5 0 0	24		
6400	So. Buller & W. Penstruthal	0 12 0	1¼	1¼	May,
4096	S. Caradon Wh. Hooper (cop.)	2 12 6	⅞		Oct.
6000	So. Carn Brea (cop.) [S.E.]	5 7 6	4½	4 4¼	Oct.
6138	S. Condurrow (tin, cp.), Camb.	2 1 0	10s.		Sept.
2283	Sou. Crenver (cop.), Crowan	9 13 6	3¼		Oct.
6000	South Darren (ld.) [L. £3½]	2 10 0	1½		Nov.
65000	S. Dev. Iron & Gen. Min. [L. £1] [S.E.]		⅞		Fully p
1024	South Ding Dong, Gulval	0 10 0	¾		Aug.
6000	S. Dolcoath & Carnarthen Con.	2 5 0	4		Oct.
6000	South Gernick (tin), Crowan	0 2 6	⅜		Oct.
1000	South Gorland	6 10 0	6	5½ 6	July,
6000	South Lady Bertha (copper)	1 3 0	⅝		Oct.
4000	South Minera [L. £5¼]	2 2 0	4		July,
5537	So. Phœnix (cop.) Linkin.	4 10 0	1¾		Jan.
1024	South Tresavean, Gwennap	2 18 9	1½		Oct.
4096	S. Wh. Betsy, Mary Tavy, Dv.	1 7 0	1		Dec.
1105	So. Wh. Crofty (cop.), Illogan	3 8 10	4		Dec.
1024	S. Wh. Ellen (cp.), St. Agnes	9 18 2	1		Aug.
1000	South Wh. Kitty (tin), Lelant	1 10 0	1¾		Oct.
1024	S. Wh. Lovell (tin), Wendron	1 4 6	2½		July,
6000	S. Wh. Margaret (tin), Ludgvan	0 3 0	7s.		Aug.
400	So. Wh. Seton (cop.), Camborne	27 13 0	8		Dec.
794	Spearne Cons. (tin), St. Just	6 7 0	3½		Mar.
970	St. Aubyn and Grylls (cp., tin)	7 14 6	2½		Aug.
5208	St. Austell Consols (tin, &c.)	3 16 0	1½		Dec.
1024	St. Ives Wheal Allen (tin)	6 0 0	6		July,
1000	Stencoose and Mawla (tin, cp.)	2 10 0	2		July,
920	Stray Park (cop., tin) [S.E.]	27 19 0	31	30 31	Nov.
5000	Tavy Con. (cop.), near Tavis.	5 12 6	1¼		June,
3000	Tees Side (ld.), Cumb. [L. £1]	0 13 0	¼	3s. 5s.	Aug.
6000	Tolcarne (cop.), Camborne	1 2 6	3¼		Aug.
2000	Treffry Consols	9 5 0	—		June,
2000	Trefulack Uni. (tin), St. Enoder	3 5 0	4½		Sept.
5000	Treloweth (copper), St. Erth	6 6 8	1⅜	26s. 28s.	Oct.
1024	Trencrom (tin), Uny Lelant	10 15 0	⅜		Sept.
5000	Tresellyn and Scaddick Cons.	1 5 6	—		Mar.
8000	Tretoil (copper, tin)	2 7 6	1½		Jan.
5600	Trevenen and Tremenheere	6 0 0	2½		Dec.
4096	Treweatha (sil.-ld.), Menhen.	4 11 6	½		Oct.
2048	Treworlis, Wendron	3 6 4	2		Mar.
4000	Trumpet Unit. (tin), Wendron	0 17 6	8s.		Oct.
3000	Tyne Head (ld., cop.) [L. £1]	0 12 0	¾		Sept.
800	Tynewydd (sil.-ld.), Cardigan	0 5 0	—		Dec.
1024	Tyringham Consols (tin)	1 10 0	2¾		Feb.
5120	United Mines (cp., &c.), Tav.	4 14 6	1⅜		Sept.
1250	Vale of Ffrith (lead) [L. £2]	0 5 0	1½		April,
1000	Waenlas (ld.), Denbigh. [L. £10]	8 0 0	5		Aug.
3000	Watermouth Gt. Sil.-Lead [L.]	5 0 0	6		Fully p
4000	Wentnor [L. £2¼]	1 18 0	1⅜		Oct.
1024	W. Alfred (copper), Phillack	36 16 5	—		Sept.
20000	West Beam [L. £1]	0 2 6	¼		Aug.
100	W. Bryn Gwiog (ld.) [L. £20]	8 0 0	12	10 12	Nov.
1218	W. Condurrow (tin, cop.), Cam.	5 7 2	5		Oct.
16	West Denbigh (ld.), Denbigh	35 0 0	100		Oct.
30000	W. Devon Con. (cop.), [L. £1]	0 12 6	½		Dec.
4620	W. Great Work (tin), Germoe	0 9 6	11s.		Oct.
25000	West Par Con. (cp.) St. Blazey	1 9 0	¼		Nov.
32	West Penstruthal	250 0 0	400		
6000	W. Polmear (tin, cp.), St. Austell	0 10 0	7s.	4s. 5s.	Feb.
1600	W. Rose Down (cop.), Caradon	3 0 0	10½	9½ 10½	Aug.
256	West Sharp Tor (cp.) Rilliaton	134 0 0	22		Dec.
6000	W. Silver Bank (sil.-ld.) [L. £3]	1 0 0	—		Nov.
5000	W. Snailbeach (lead) [L. £2]	1 0 0	1¼		July,
4096	West South Caradon (copper)	1 16 6	1		Oct.
1056	West Stray Park (cop.), Camb.	7 15 0	4½		April,
5000	West Tolcarne (cop.), Crowan	1 12 6	⅝		Sept.
512	West Tolgus (cop.), Redruth	22 0 0	—		Nov.
1879	West Trevelyan (tin, copper)	9 4 6	2½		Dec.
4000	West Wendron (tin), Wendron	0 18 0	3s.		Oct.
512	West Wheal Frances, Illogan	71 5 0	13		Dec.
10000	West Wheal Jane (tin, &c.)	2 18 6	¾		Oct.
1024	West Wheal Lovell, Wendron	2 3 1	1		Dec.
3000	W. Wh. Margaret (tin), Uny Lel.	2 18 6	—		Nov.
6000	Wheal Agar (copper), Illogan	3 6 0	3		July,
2048	Wh. Agnes (sil.-ld.), St. Kew	—	2		No call.
1024	Wh. Anna (ld., blende), Perranz.	0 13 6	1¼		Oct.
500	Wheal Anne (tin), St. Austell	1 11 0	1½		Nov.
5000	Wheal Annie (cop.), Gwinear	0 15 0	¾		No call.
5990	Wh. Arthur (cop.), Calstock	3 12 0	14s.	15s. 16s.	Sept.
1000	Wheal Basset and Grylls (tin)	7 0 0	10	8½ 9	Mar.
18000	Wh. Concord (sil.-ld., cp.) [L. £1]	0 5 0	—		May,
6000	Wheal Crebor (cop.), Tavistock	0 16 6	10s.	8s. 10s.	Oct.
5120	Wheal Cupid (cop.), Redruth	3 18 0	1¾		Oct.
512	Wh. Damsel (cp., tin), Gwennap	25 3 6	15		Oct.
4000	Wh. Emma (cp) Buckfastleigh	2 15 0	4		Nov.
4096	Wheal Emma (tin), Breage	0 10 0	¾		Aug.
6000	Wh. Grenville (copper) [S.E.]	7 9 0	1⅞	1¾ 1⅞	Nov.
5120	Wheal Harriett, Camborne	4 2 0	1½	1¼	Sept.
6000	Wh. Harris (ld., cop.), Lifton	0 10 6	1		Feb.
1024	Wheal Hearle, St. Just	9 13 8	20	18 20	Dec.
2048	Wheal Hope (sil.-ld.), Perran	0 15 6	1¼		Oct.
10000	Wh. Lopes (tin, zinc) [L. £1]	0 10 0	—		Feb.
6000	Wheal Louisa (cop.), Redruth	0 10 0	1½	1¾	Sept.
5640	Wh. Mary Emma (tin) Lydford	0 10 3	—		April,
6000	Wheal Moyle, Gwennap	2 4 0	2¼	2 2¼	Aug.
6000	Wh. Norris (tin, cp.), St. Cleer	1 10 0	2⅜		Oct.
256	Wheal Polmear, St. Austell	17 10 0	220		
2315	Wh. Pollard (cop.), St. Neot's	2 10 0	½		Oct.
1000	Wh. Prosper (cp., tin), Breage	9 0 0	3		Aug.
1879	Wheal Prospidnick	1 19 0	5¼		Nov.
240	Wh. Reeth (tin), Uny Lelant	77 10 0	30		Sept.
600	Wheal Rose (ld.), St. Columb	1 0 0	6		No call.
1024	Wh. Sicily (sil.-ld.), Broadoak	3 10 0	3		Sept.
4096	Wheal Sidney (tin), Plympton	3 9 1	1¾		July,
2048	Wh. Sithney & Carnmeal Uni.	6 0 0	2½		Nov.
1024	Wheal St. Andrew (copper)	5 0 0	5		Jan.
512	Wheal Trannack, Sithney	2 10 0	—		June,
512	Wh. Trefusis (cop.) Gwennap	26 5 0	3		Aug.
6000	Wheal Union (cop.), Redruth	3 4 0	2½	2 2¼	Aug.
6000	Wh. Unity (cop., tin), Gwinear	10 18 0	¾	13s. 15s.	Nov.
4096	Wh. Uny (tin, cop.), Redruth	8 8 6	5⅛	5⅝ 5⅞	Dec.
1024	Wh. Vyvyan (cop.), Constantine	2 0 0	—		Dec.
6000	Wheal Welcome (tin, copper)	1 0 0	4½		April,
6400	Whitford (lead), Holywell	10 16 6	—		May,
5000	Willow Bank (lead) [L. £2]	1 14 0	4s.		April,
1024	Worvas Downs (tin), Lelant	4 15 0	5		Sept.
2097	Yarner (copper), Devon	2 4 6	2		Oct.

SLATE QUARRIES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
8800	British Slate [7000 £1, 1800 £10] [L.]		1¼		Nov.
10000	Criccieth, Carnarvon [L. £3]	1 10 0	1½		Mar.
20000	Festiniog Slate Quarry [L. £5]	—	—		
6000	Glan-y-Pwll, Merion. [L. £5]	1 0 0	1¼		Aug.
10000	Great Moelwyn Slate [L. £5]	2 0 0	1¼		Sept.
600	Llangollen Slate and Slab	—	—		
10000	Lower Taldrws [L. £2½]	1 10 0	1¼		Oct.
6000	Slate Mountain, Merio. [L. £5]	2 0 0	—		Sept.

*** Those mines with [S. E.] appended have been admitted on the Stock Exchange. Those mines with [L.] appended have been incorporated with Limited Liability.

*** Our object being to make the Share List correct, we earnestly call upon all who have the power, to aid us, by forwarding any alterations or correction which may, from time to time, come under their notice. To shareholders, as well as those officially connected with the mines, we appeal for information. Reports from mines—in fact, mining intelligence of every description, forwarded to our office, will meet ready attention.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, No. 26, FLEET STREET, E.C., where all communications are requested to be addressed.—*January* 4, 1862.